NEW YORK TIMES BESTSELLING AUTHOR

CLYDE PRESTOWITZ

JAPAN RESTORED

HOW JAPAN CAN REINVENT ITSELF AND WHY THIS IS IMPORTANT FOR AMERICA AND THE WORLD

TUTTLE

VISIT…

There has probably not been a prescription for revival as radical, as pertinent, and as challenging as the one that Clyde Prestowitz lays down.

—Bob Carr, former Foreign Minister of Australia

Prestowitz advises Japan how to get its act together based on his own experience advising the US. It is a worthy read.

—Richard C. Koo, Chief Economist, Nomura Research Institute

Japan Restored is written as a vision of Japan in the year 2050, when the country's economic recovery has made it a world leader once again. Prestowitz looks back to the mid-2010s as a crisis point for Japan when a reform commission was set up to help the country regain its former position as a leader in technology, business, and geopolitics. Looking at education, innovation, the role of women, corporate organization, energy, infrastructure, domestic government, and international alliances, Prestowitz draws up a fascinating and controversial blueprint for the future success of Japan, and tells us why this matters for America and the rest of the world.

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Praise for JAPAN RESTORED

Thirty years ago, the name Clyde Prestowitz stood for the top Japan-basher who was warning the US to get its act together. But the true Prestowitz also had deep respect for Japanese values, was proficient in Japanese, and adopted a Japanese boy as his son. Now, in his latest book, he is advising the Japanese how to get its act together based on his own experience advising the US. It is a worthy read.

—Richard C. Koo, Chief Economist, Nomura Research Institute

Can Japan reverse decline? We all have a stake in this. Japan, after all, might be a model for other advanced post-industrial societies. There has probably not been a prescription for revival as radical, as pertinent, and as challenging as the one that Clyde Prestowitz lays down. Yet as I read it I found myself hoping that Japan will adopt his advice and continue to make its contribution to world civilization.

—Bob Carr, former Foreign Minister of Australia

"Ever since Japan successfully challenged American industrial dominance in the 1980s, Clyde Prestowitz has been a leading voice in urging us to think differently about this remarkable and still-misunderstood nation. His newest book builds on his rich career in trade and economic policy to probe more deeply into both Japan's persisting problems and its still-enormous potential to remain a creative force in the global economy."

—Martin Fackler, New York Times Bureau Chief, Tokyo

Fascinating story of how a country could reinvent itself, in a world where the focus is on China and Japan is yesterday's lunch. Clyde Prestowitz does a terrific job of creating a fictional blueprint of how Japan can become a world power and the impact it will have on our children and grandchildren. It's hard to put down.

—Daniel M. Slane, Commissioner, Congressional US-China Economic and Security Review Commission, Washington, DC

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CLYDE PRESTOWITZ

with Hiromi Murakami and William Finan

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INTRODUCTION

Bookends

I first saw Japan on the cold, gray morning of February 5, 1965, as SS *President Cleveland* steamed into Tokyo Bay toward Yokohama after a storm-tossed six-day voyage from Honolulu. Accompanied by my American-Chinese wife Carol, our four-month-old daughter Anne-Noelani, and my wife's Chinese uncle, who ran the ship's laundry, I looked down from an upper deck at the totally unfamiliar scene below as the tugs nudged our great vessel into its berth.

As we marched down the gangway carrying luggage and baby, and passed through passport and customs control, I quickly realized that the year of Japanese language study I had just completed at the East-West Center in Honolulu was not going to get me very far. The passport and customs officers seemed determined to speak with the cadence and speed of machine gun fire, and I could read only a very few of the Japanese words on the signs and instruction posters around us. Carol's uncle helped us get a cab to Yokohama's Sakuragicho station, where we boarded the train to Tokyo. Our car was full of women, many of them wearing colorful kimonos; and of men, some of whom were wearing boots or shoes with a separate section for the big toe—like a mitten, but for feet rather than hands. I remember thinking, "Well, you wanted something different. Looks like this is it."

This trip had originated two years previously as I was trying to figure out my expected graduation from Swarthmore College in June, 1963. I had been an exchange student to Switzerland in high school and had been bitten by the travel bug. I wanted to see the world upon graduation from college, but I had a small problem: money; or rather, the lack thereof. So I looked for grants, and while doing so, stumbled upon the East-West Center, at the University of Hawaii. It was offering a super deal—a two-year grant with tuition, room, board, books, and travel all paid, along with two hundred dollars a month for spending money. Grantees were required to spend a year studying any subject they desired at the university. They were also required to study an Asian language; the second year of the two-year grant period would be spent studying or working in the country

of the language that had been chosen. It all sounded like a good deal to me. I applied, was fortunate enough to receive a grant, and set out for a year under the waving palms of Honolulu. Hey, somebody had to do it.

I had initially thought I would study Chinese, but my father was a chemist and metallurgist who worked in the welding and steel industry. Now remember, this was 1963, and China—then under Mao—was one of the poorest countries in the world, while Japan's economic miracle of postwar recovery was about to be announced in the January 1964 cover story of the *Economist*. My dad said, "Look, son, why do you want to study Chinese? They don't make anything. You should study Japanese. They make stuff." So that's how I came to register for Japanese when I first enrolled at the East-West Center and the University of Hawaii in September of 1963.

Although the *Economist* had hailed Japan's rapid economic development, to a twenty-three-year-old American kid the country didn't seem all that developed. Most people rode bicycles and buses or walked to their destinations. There were few traffic jams in Tokyo, because there was little auto traffic. I remember marveling at the delivery boys on bicycles who balanced bowls of steaming noodle soup without spilling a drop as they ferried them to customers' homes. While our Japanese friends described it as a luxury dwelling, the apartment my wife and I managed to find had no hot running water, no bath (remember that our daughter was four months old), no stove, no central heat, no dishwasher, no washer or dryer for clothing, and only two electric bulbs. (We did, however, have a Western toilet.) These were the days before disposable diapers, so we had to boil diaper-washing water every day, and there was no such thing as washing your hands and face with warm water.

We cooked over two small gas devices that looked like the Bunsen burners in my high school chemistry class. We had one four-tatami-mat room in which we lived and slept, and one two-tatami room where we kept the baby's crib. We heated the rooms with a kerosene stove that had to be turned off at night because of the ever-present danger of earthquakes tipping the stove over in the middle of the night and burning the whole neighborhood down. We bathed at the *sento*, the public bath where the dividing wall between the women's and men's baths was shorter than the average American. After undressing, the men handed their baskets of clothing to young female attendants, who returned them when the men had finished their soak in the public pool. In the streets on winter nights, one could always recognize those who had just been to the bath because they

would be enveloped in the white cloud precipitated by the action of the cold air on their moist, warm skin and clothing. Upon returning home from the *sento*, we went to bed on futons rolled out on our tatami floor and dropped off to sleep as the exhalation of our warm breath formed clouds in the cold of the unheated room.

Luxury it was not. Yet we did not feel deprived by the experience. Rather, we felt greatly enriched by it and privileged to have had it. This was a last glimpse of a less Westernized, less modernized Japan that has vanished forever. That magical time was the first bookend of my ensuing life and career, and nostalgia for that era has been part of the impetus for this book.

I left Japan in late 1965 and entered the US Foreign Service, first as vice-consul at the US Consulate General in Rotterdam and then as third secretary of the US Embassy in the Hague. Later I became a business executive with the Scott Paper Company in Philadelphia and Brussels. But I returned to Japan in 1976 as vice president of the Swiss consulting company Egon Zehnder International. I discovered that in the decade that I had been away, Japan had become a rich, developed country. The bicycles had not only yielded to automobiles, but the automobiles were causing endless traffic jams. Indeed, *jutai* (traffic jam) became one of my wife's favorite Japanese words. And the *sento* were mostly gone also, having been replaced by the *o-furo* (hot tub) now routinely included as part of the Japanese home or apartment. Of course, this modernization also had its downside. The air quality of Tokyo had become so poor that face masks were routinely worn by a large number of Japanese.

This was the heyday of Japan, Inc., the market-based but government-guided system of capitalism that had accomplished the postwar economic miracle and that now, in the late 1970s, was conquering the world's markets in steel, textiles, and consumer electronics. It might have been called capitalism with Japanese characteristics. Those special characteristics included lifetime employment for a cadre of "regular" employees; extreme company loyalty on the part of employees who considered themselves part of a corporate family and who would almost never consider changing employers; enterprise unions rather than industry-wide unions; and protection of the domestic market from imports by a variety of means. Japanese businesses also featured a corporate structure dominated by quasi-cartels of interlocking firms known as *keiretsu*; just-in-time delivery; *kaizen* (continuous improvement); six-sigma quality control; government targeting of and subsidies for the development of so-called strategic industries

(machinery, semiconductors, computers, steel, etc.); and a policy of keeping the yen undervalued versus the dollar as a way of indirectly subsidizing exports and imposing a tariff on imports.

First as a consultant primarily to foreign companies trying to crack the Japanese market, and then as the CEO of the Japan branch of a US medical equipment manufacturer, I learned how the system worked through tough experience in the school of hard knocks, but also through the patient explanations of a few friendly Japanese and American tutors. In the late 1970s, the Japan, Inc. system appeared to be unbeatable: Japan's automakers were using it to begin attacking the Detroit automakers, while its semiconductor producers started aiming at Silicon Valley. By 1980, both the US semiconductor companies in the Valley and the US auto makers in Detroit had joined representatives from the steel, textile, machine tool, consumer electronics, and other industries in a pilgrimage to Washington, DC to demand that the US government take some action against Japan's "unfair" trade practices.

Of course, it was in 1980 that Ronald Reagan was elected president, which meant that a whole new set of senior officials would be taking the reins of the US government. In September, 1981 I was appointed to the US Department of Commerce, first as deputy assistant secretary of commerce, then becoming acting assistant secretary, and finally counselor to the secretary. In these positions, one of my main responsibilities was to help lead what had become an endless series of trade negotiations with Japan.

Indeed, it seemed that there were negotiations in virtually every sector of the economy. Semiconductors, television sets, autos, almonds, rice, tobacco, telecommunications equipment and services, insurance—you name the industry, and we had a negotiation going either to open the Japanese market or to stop predatory Japanese practices in the US market. It all looked very complex, and if you tried to absorb all the details, it was. But in essence it boiled down to two competing claims. US industry and the US government negotiators continually complained that Japan was "cheating" by not playing by the rules of free trade and free-market capitalism. They said its industry was being subsidized, and was dumping (selling below cost or below the price in the home market) products into the US market while its home markets were protected like the impregnable castles of feudal Yamato by a variety of means. Japanese industry and Japan's negotiators responded by essentially saying, "What are you talking about? Our markets are more open than yours. We have fewer and lower tariffs than you do.

The problem is that you don't try hard enough. In fact, you hardly try at all. Your quality is atrocious, your labor relations are adversarial, your delivery is always late, your service is non-existent, and you put the steering wheel on the wrong side of the car [Japan is right-hand drive, like Britain]. You should stop whining and mau-mauing us and pull your socks up with that legendary American 'can do' spirit you're always talking about."

Between 1980 and 1985, the US trade deficit with Japan grew from US$10 billion to US$50 billion, which could be translated into about 500,000–800,000 lost jobs during a period of recession. My mission was to stop this sudden flooding away of American production, jobs, and technology in a manner that would also maintain free-trade rules and US competitiveness. In particular, my task was to open the Japanese market to American and other foreign imports and investment.

As noted above, the debate was kind of a standoff, with the US side arguing that Japan was acting unfairly, and Japan saying the problem was simply a matter of incompetence by US business and its US government champions (namely me). In fact, there was truth in the Japanese argument. For instance, it was often the case that US companies had fallen down on quality. In the auto industry, independent quality analysts like Consumers Union consistently found the reliability and quality of Japanese autos to be superior to that of the cars made by the "Big Three" Detroit-based US producers. Similarly, Hewlett Packard unleashed a firestorm in the early 1980s when it released a quality comparison study showing that Japanese semiconductors were of better quality, on average, than semiconductors made by US producers.

But this was far from the complete truth. For it was also the case that the Japanese economic miracle system that I had come to know so well had been specifically designed to keep foreigners out, and to promote production in and exports from Japan. While it was true that Japan had tariffs that were generally lower than US tariffs, it had huge tariff spikes on products like rice for whose production it was not competitive. Even more importantly, it kept the yen undervalued versus the dollar and maintained an intricate web of non-tariff procedural, regulatory, and structural barriers to market access. The *keiretsu* structure of interlocking shareholdings and directorships among companies itself had been constructed to prevent takeovers of Japanese corporations by foreign companies.

Distribution chains presented another formidable barrier. For example, in

the United States, auto dealers are by law established as independent businesses whose sales cannot be controlled by the auto producers. Thus, a dealer can sell Fords, Hondas, Volkswagens, and any other brand that appears attractive. This structure meant that when the Japanese auto companies entered the US market, they did not have to build their own dealership networks from scratch. They just piggybacked on the existing Ford, GM, and Chrysler networks. Not so, however, in Japan; there Toyota dealers sell only Toyotas, and woe to the renegade dealer who tries to break suit. This structural difference in the two markets made it much more difficult to enter the Japanese auto market than to sell into the US market.

I could go on, but I'm sure you get the idea. The task of opening the Japanese market, which the White House had assigned to its trade negotiators like me, essentially meant restructuring the economic system that had produced the miracle and that seemed to be conquering all before it. Trying to change what all Japanese were convinced was a winning system was not our only handicap; many in Japan were certain that their economic system was a product of their culture and thus uniquely Japanese, and my colleagues and I were therefore perceived by many as attacking and trying to change that culture. Our final handicap was that many American economists and commentators didn't understand the nature and structure of the Japanese economy and assumed that because it had low tariffs, and because Japanese officials insisted that theirs was a capitalist-market economy just like that of the United States, that it indeed was just like the US economy—with, to be sure, a few quirky Japanese elements.

As a result, many Japanese and American commentators criticized us for unduly trying to open a market that was already open. As lead negotiator, I, in particular, was branded as a "Japan-basher" by Hobart Rowen of the *Washington Post*, and that moniker stuck for a long time in both the Japanese and American press. It was a very troubling term for me because it implicitly tagged me as a racist. Consider for a moment that Rowen could have called me a critic of Japan. But criticism is intellectually and morally legitimate. "Bashing," on the other hand, is emotional and irrational, full of hate, and with intent to harm for no good reason. Because it was a handy bit of shorthand, journalists thoughtlessly bandied the term about and it gained great currency, but it was deeply and fundamentally dishonest and misleading. It was intended to—and did—deflect the discussion of US-Japan trade from legitimate complaints about Japan to personal defamation.

This was a painful period for me both professionally and personally. Professionally, while I managed, along with other US negotiators, to drive a few deals like the US-Japan Semiconductor Agreement and the Telecommunications Agreement, which did actually open a couple of Japanese markets at least to some extent, most of our effort seemed to be in vain. On a personal level, it was extremely unpleasant to be personally subjected—and to have my family (especially my adopted Japanese son) subjected—to a constant stream of media stories calling me anti-Japanese or even anti-Asian. Some good friends in Japan attempted to rebut this line by writing letters to the editors of leading Japanese newspapers, but their passion was not sufficient to counter the bad image of me being fostered by media commentary.

I left the Reagan administration in 1986 and wrote the book *Trading Places: How America Is Giving Its Future to Japan*, in which I tried to explain the major insight I had gained from my years of working in and negotiating with Japan. It was that Japan wasn't cheating and the United States wasn't falling down on the job. Rather, the two sides were simply playing different games. The US was playing baseball while Japan was playing football. Japan wasn't cheating or playing bad football, and the US was playing good baseball. The difficulty was that the Americans kept acting as if and insisting that both sides were playing baseball. Because they weren't, and because the Americans (for reasons both of economic orthodoxy and geopolitical convenience) refused to admit that, and because football is a rougher game than baseball, the Americans were taking a beating.

Upon completion of *Trading Places*, I moved on to writing about other issues such as the creation of the World Trade Organization and the North American Free Trade Agreement, and became more and more detached from Japan. Indeed, the term "Japan passing" came to be used in the 1990s to describe the phenomenon of people passing by Japan on their way to China, Korea, and Southeast Asia, overlooking the Japanese market in favor of greener pastures elsewhere. I became one of the passers.

Ironically, despite appearances to the contrary, Japan would have been wise to have listened to the small band of "revisionists" (in addition to myself, these included Jim Fallows of the *Atlantic*, Chalmers Johnson of the University of California at Berkeley, and Karel van Wolferen of the Dutch newspaper *NRC Handelsblad*) who were calling for reform and opening in Japan. As things turned out, Japan's waves of exports and huge trade surpluses were not so much

signs of success as of trouble. The Japan, Inc. catch-up formula for achieving the "miracle" had worked. But it is sometimes possible to have too much of a good thing. The miracle had been based on high savings, high investment in manufacturing, relatively low domestic consumption, and ever-rising trade surpluses of manufactured goods. By the early 1980s, constant repetition of this formula was already creating overinvestment in excess production capacity in Japan.

The economy was becoming seriously unbalanced. Japanese consumers were falling further behind their peers in the United States and Europe as the country continued to expand its huge, modern manufacturing sector while neglecting its increasingly inefficient and outdated services and new business development capabilities.

The big trade surpluses were creating pressure on Japan to strengthen the yen versus the dollar, and eventually it did so in 1985. This should have resulted in a restructuring and rebalancing of the economy. But the Japanese government and industry pulled out all the stops to keep the old miracle machine going. The central bank flooded the markets with cheap money, and investment became easier than it had ever been. Indeed, for major companies like Toyota in 1989–1991, the cost of capital became negative. That's right—the markets paid Toyota to take the money. Of course, that made it easy for the manufacturers to add yet more capacity. On top of that, the easy money aimed at keeping Japanese manufacturers competitive despite the rising yen also created a huge real estate and stock market bubble. It was the bursting of that bubble in 1992 that set the stage for the ensuing two "lost decades" that have left Japan in its present crisis.

In 2011, I became engaged in a project comparing some key Korean industries to their Japanese competitors. While doing this project, I realized more and more that Korea was eating Japan's lunch. At first, I couldn't believe it. Hyundai was taking market share from Toyota in the US and European markets? Samsung was treating Sony like a ninety-pound weakling? And looking beyond Korea, Apple was acting as we used to expect Sony to act. Samsung and Apple were battling it out in the smart-phone market, but there were no serious Japanese contenders. Sony had only a single-digit market share. What was going on, I asked myself.

To answer my own question, I began spending more time in Japan talking to old friends and new acquaintances in business, government, academia, labor, and the media. What I found was disturbing. The old cooperation and

communication between government and business seemed to be mostly dead. Despite lots of talk and some efforts, the economy had not taken many steps toward becoming rebalanced. There was also a kind of "nothing can be done" mood in place of what I remembered as the old Japanese spirit of optimism and perseverance summed up in the much-used rallying cry of *"Gambatte!"* Particularly among young people, pessimism was rampant. I found myself worried for their future, for the future of the children of my Japanese friends, and for the future of the country that had so much been a major part of my life. I was also approaching my seventy-second birthday, and was increasingly conscious of the passage of time and the fact that I had been watching and working in or on Japan for fifty years. What could I do to warn the country and help it reverse course?

I decided to write this book—in some ways a second bookend to my long involvement with Japan—in the hope that my experience might produce some insights and suggestions that Japan could use to restore its former vitality. The story opens in the year 2050, when Japan has, in fact, been fully restored. It is the world's leading country in a wide variety of technologies and arts, as well as in business, innovation, and clean energy. Students around the world no longer want to go to Harvard or Stanford; rather, they want to study at Tokyo University or Kyoto University. Patients around the world no longer flock to the Mayo Clinic; rather, they go to the Meguro Clinic in Tokyo. This is very different from the way things looked in 2015. Of course, the question is: What happened?

The rest of the book tells the story of "what happened." But first it emphasizes the point that "what happened" is potentially possible and fully believable. After all, Japan has reinvented itself twice in the past century and a half—once in the Meiji Restoration of 1868, when Japan opened itself to Western influences after centuries of isolation, and again after World War II. So we know that Japan is capable of revolutionary change. Japan can do it. The question now is only how to do it again.

The previous reinventions took place after moments of great crisis. So it is logical to conclude that the third reinvention will also require one or more crises. As it happens, Japan is already facing several severe crises, which are outlined in chapter 2. Most important in the short run is the threatening collapse of the economy in the wake of the failure of Abenomics. In addition, chapter 2 also introduces some conjectured crises, such as an Israeli attack on Iran and the withdrawal of the US Seventh Fleet from Japan, which are easily possible to

imagine. These and other crises result in a national emergency and the creation of an Extraordinary National Revitalization Commission representing all sectors of the society, and which is charged with the task of once again reinventing the country.

Chapter 3 turns to the question of Japan and the international scene. For many years Japan has become accustomed to being sheltered under the American security wing, and many Japanese cannot imagine that this situation would change. But the fact is that it will. So it is important to understand that Japan's major problems will have to be faced in the context of a world in which the US security assurance will be more limited than it has been since 1945. In this chapter, America adopts a policy of withdrawing its military forces from Japan to the second island chain, and Japan is forced to become a much more substantial geopolitical and diplomatic power, although the US does not entirely disappear from the scene.

Chapter 4 begins to deal with Japan's key problems as I see them. The first is not the economy. That, of course, is a major issue and the most immediately palpable, but the truly existential issue facing Japan is its demographics. The country is dying; I cannot even add the qualifying adverb slowly, because the rate of population aging and shrinkage is rather rapid. Today's 124 million Japanese could become as few as 88 million in the thirty-five years it will take to reach 2050. It is not too late to turn this around. Other countries like Sweden and France have done it. But in just a few years it will be too late. So Japan must very quickly take the steps that other countries have already shown can work. Mainly this will require a dramatic change in the role of women and the attitudes of men, as well as in immigration policies.

Chapter 5 deals with Japan becoming a bilingual nation with English-speaking ability similar to that of countries like Finland, Poland, and Germany. At first glance this may not seem to be a high-priority issue like demographics, but it has a huge bearing on demographics, which in turn has a huge influence on other issues facing Japan. If Japan could speak English well, the country would attract highly talented people from abroad as long-term residents and even, perhaps, as citizens. It could easily stay up-to-date on the latest developments in science, technology, business, finance, and everything else. Thus it is essential that Japan become highly capable in English.

Chapter 6 attacks the need for Japan to promote and become a global leader in innovation by reducing the high risk attached to entrepreneurial activity in

Japan. Chapter 7 looks at how Japan could become energy-independent by means of developing its many potentially inexpensive domestic energy sources. Chapter 8 suggests how Japan might modernize its corporate structures and systems with particular emphasis on equal status and treatment for all employees, and Chapter 9 reinvents the structure of the Japanese economy to get rid of the monopolies, barriers to competition, regulatory roadblocks, and powerful interest groups like the farm cooperatives and the medical association. Finally, chapter 10 foresees a fundamentally decentralized and democratized Japan organized along federal lines like Germany and the United States.

It is my hope that future Japanese will remember me as a friend who offered some small but useful suggestions.

In closing, I should emphasize that this book was completed in April, 2015. All events described until that date are real and actually occurred. After that time, all events mentioned are entirely my own forecasts and conjecture based on my experience and understanding of history and of global trends.

CHAPTER 1

Tokyo, 2050

It's spring 2050, and you're embarking on a business trip to Tokyo, a city you haven't visited for thirty-five years. You board your All Nippon Airlines flight in Washington, DC, and after a smooth ride of about two and a half hours find your Mitsubishi 808 supersonic jetliner circling Haneda Airport in preparation for landing.

Though it is not the world's first supersonic jetliner, the 808 is almost twice as fast as the Anglo-French Concorde of the 1970s, carries more than three times the Concorde's passenger load, and has almost three times the Concorde's range. Made of carbon nanofiber and the most advanced electronics, the plane and all its components were entirely developed in Japan after Mitsubishi Heavy Industries acquired Boeing in 2020. This occurred as a result of Boeing's bankruptcy in the wake of the continuing fires and groundings of its 787 Dreamliner, which many analysts had waggishly come to label the "Nightmare Liner." Now all of the world's major airlines depend on the 808 for their long-range flights. Exports of this plane, which is made only in Japan, have helped drive the Japanese trade surplus back to levels last seen in the 1980s.

As the flight settles into its landing pattern, you see spread out below one of the world's most advanced and convenient airfields. Haneda long ago replaced Narita Airport as Tokyo's main gateway, and visitors immediately fall in love with it because of its user-friendly systems and the fact that it lies within only thirty minutes of downtown. There is no need for passport or customs control because your travel documents have already been scanned on the plane and reviewed electronically during your flight. After deplaning, you are met by luggage-carrying robots programmed to recognize you as the owner of the suitcases; they accompany you to the train or intelligent vehicle terminals you have preselected.

Here is where you truly make first contact with modern Japan. There are no limousine buses and no taxis with drivers from the airport to downtown Tokyo and other destinations. Rather, there are only robot-driven high-speed trains and

driverless vehicles to transport each passenger or group of passengers. No one drives in Japan any longer; the vehicles are all smart, as are the roadways and buildings. A passenger simply steps into a vehicle and tells it the desired destination. The vehicle then automatically moves the passenger to the destination via the fastest route at that particular time. Thanks to these innovations, there are virtually no transportation-related accidents and thus no transportation-related injuries or deaths in Japan anymore.

Smart transport is safe, but also inexpensive, because Japan has developed a variety of low-cost wind, photovoltaic, ocean current, and methane hydrate energy sources and energy-storing devices, linking them all together in a country-wide smart electrical distribution grid. This has reduced the cost of electric-power generation to almost nothing, far below the cost of Japan's former outdated mix of nuclear and fossil-fuel power plants.

As the vehicle quietly enters the outskirts of Tokyo, you are surprised at the height of the buildings. Because of the instability of much of the land of Japan due to the prevalence of earthquakes, Tokyo had always been a relatively low-rise city. Of course, advances in earthquake-resistant construction had enabled the construction of skyscrapers there beginning in the 1970s. But Tokyo did not then go on to develop a skyline like those of New York and Hong Kong. Now that has changed. Always the leader in earthquake-proof building designs, Japan has pushed its metallurgical and structural technology for dealing with earthquakes to even higher levels, so that the risk of earthquake damage to buildings in the Tokyo area is virtually nonexistent. But even more important has been Japan's development of the carbon-fiber-based UltraRope technology. First introduced by Finnish elevator-maker Kone in 2012, and then further advanced by Japan's carbon-fiber and heavy equipment makers, this technology has created cables that are one-seventh the weight of conventional steel cables. Before UltraRope was developed, skyscrapers required riders to change elevators once or twice in going to the top of the building. The extra elevators also made the buildings heavy and thereby limited their height because of pressure on the foundations. The UltraRope cables allow elevators to rise more than a kilometer in a single run, making lighter buildings possible. This has led to the construction in Tokyo of a multitude of office and apartment buildings higher than Dubai's Burj Khalifa, which was the world's tallest building in 2015.

Not only has this allowed for more efficient use of space and more comfortable office and living arrangements, it has also resulted in numerous

unexpected economic benefits. Greater urban density, as it turns out, fostered a smart city environment that stimulated entrepreneurial activity, which in turn led to more and faster innovation. Of course, other cities around the world have followed Tokyo in building taller structures, but Japan is the global center of advanced structural design and know-how. Its engineering and construction companies are in great demand worldwide, acting as the leaders for most of the world's major engineering and construction projects.

Upon arrival at the designated hotel, you are greeted in impeccable, unaccented international English by the staff. (This is just a small piece of evidence that Japan has become a fully bilingual country, in which all students must master English as a condition for graduation from high school and for obtaining a job. You also quickly note that many television and Internet broadcasts carry English subtitles, and that many programs are broadcast in English with Japanese subtitles.) You are guided immediately to your room without going through any check-in procedures—those have all been handled electronically from your vehicle while you were en route from the airport.

Indeed, to say everything has been handled electronically may give a false impression. As far as the individual is concerned, it would be more accurate to say that everything is handled verbally. Japanese electronics, telecommunications, and software industries have evolved to the point at which people can simply give verbal commands, statements, or queries to ubiquitous smart devices that perform the necessary and requested operations. People wear watches or other jewelry with embedded electronics and voice-recognition capability. These devices communicate with enormous networks that link vast clouds of databases and hypercomputers. Needless to say, the development of all these capabilities has required the invention of completely new materials, industrial processes, sterile environments, tools, communications technologies, and much more. Of course, Japan is not the only country with such capabilities, but it is where most of them were invented or developed, and where they are the most advanced and the most numerous.

For instance, many visitors come to Japan these days for health reasons. Some have health problems and come for the latest treatments—including stem-cell-based regeneration of severed nerves and malformed limbs—and advanced diagnosis services. Others come to undertake health-related study or to work in Japanese hospitals and institutes. From all perspectives, Japan has become a mecca for people interested in health care, particularly those interested in

sustaining their quality of life after age sixty-five. It is easy to understand why. The average life expectation at birth in Japan is now ninety-five, about eight years longer than in any other country. For those who make it to eighty, an age of more than a hundred is virtually certain. Most importantly, the incidence of Alzheimer's disease and dementia has been dramatically reduced, so that most older Japanese are not only alive, but living well.

This is partly due to diet and positive environmental factors such as public hygiene, clean air and clean water, community health programs for elders, and regular exercise. But it is also due to the most advanced medicines and health-care services on earth. Medical tourism has become one of Japan's leading industries, topping even the aircraft industry in the yen value of its exported services. Today, everyone in the world with serious medical problems seeks to have a Japanese doctor assist with any operations via video linkup, and they typically seek second opinions from Japan's best and brightest doctors. The Japanese pharmaceutical industry has become the world leader in mass production of the antibacterial agents that have replaced antibiotics in the fight against infectious diseases, as well as a multitude of drugs and treatments for dealing with dementia, Alzheimer's disease, and other illnesses of old age.

At the same time, Japanese makers of medical instruments such as CAT and MRI scanners, robots for automated surgery, and patient-monitoring equipment have become by far the world's leading producers. In addition, Japan's expertise in life-support systems, chemical medical analysis, and smart artificial limbs, eyes, ears, hearts, hormones, and even partial brains is unmatched. Even more impressive is what the Japanese medical industry has been able to do with stem cells and stem-cell technology. Aged skin can be rejuvenated and replaced. Badly damaged or diseased internal organs such as the liver and pancreas can be mostly removed and recreated. Of course, many genetic disorders can be diagnosed during the fetal period and prevented by use of a combination of targeted gene removal and replacement and stem-cell treatment.

Perhaps the most important and impressive advance has been the evolution of the Japanese medical profession into the unquestioned world leader. Students and interns from all over the world strive for admittance to Japanese medical schools, postdoctoral positions, and internship programs. Japanese doctors, with their advanced medical training, are eagerly sought by foreign hospitals and as speakers and lecturers at leading universities and conferences. At this moment, if you're going to have surgery, you want your doctor to be Japanese. If you are

planning to have a partial brain transplant, the doctor has to be Japanese, because no non-Japanese doctor has yet mastered the technique.

As in medicine, so in athletics: anyone aspiring to be a world-class player in almost any sport will need a Japanese coach. This was made very clear by the complete dominance of Japanese athletes in the 2020 Tokyo Olympics. In the twentieth century and even in the first two decades of this century, Japan was not renowned for its world-class athletes—except in the Japanese martial arts, where Japan dominated the list of world champions. But in the just-completed Timbuktu Olympic Games, Japanese athletes took eighty gold medals, twice as many as the runner-up Americans. In the past, the Japanese had always been handicapped by small stature, largely as a result of inadequate nutrition in childhood years. By the turn of the twenty-first century, however, Japanese nutrition was not only good; it was better, broadly speaking, than that of any other country, as were medical treatment and disease prevention. The competitive drive of Japanese athletes had always been strong. Once they also had competitive size, they wasted no time in becoming the world's most feared opponents. Soon they were producing outstanding coaches and developing entirely new training techniques, and increasingly dominated global sports in the same way they came to dominate global construction and global medicine. It has been years since any non-Japanese made it to the top sumo ranks, while Japanese baseball pitchers now hold virtually all the global pitching, batting, home-run, and other baseball records. It goes without saying that Japanese golfers, soccer stars, and tennis players dominate the world matches, and the old America's Cup sailing race is now called the Yamato Cup.

Not only are Japanese bigger now, but there are also more of them. Japan is one of the few major countries with a growing population and workforce. Women of childbearing age are having an average of 2.3 children per woman, significantly above the population replacement rate of 2.1. In addition, Japan has begun to welcome immigrants, especially those with advanced education and skills. Thus, after a dip in the first decade of the twenty-first century, Japan's population is growing again and will soon surpass the 150 million mark, even as surrounding countries such as China, Korea, and Russia continue to suffer the slow death of population decline. Naturally, the population growth is driving economic growth. As a result of a growing workforce, combined with strong productivity increases and advances in technology, Japan's GDP is now increasing at 4.5 percent annually, far beyond that of any other major country and just under double that of China.

The foreign businessmen who visit the headquarters of Japanese corporations quickly see a key element in this explosion of population and economic growth. Almost half of the executives with whom they meet are women and non-Japanese. Indeed, if the event is a board of directors' meeting, foreign executives sometimes wonder whether their airplane accidentally landed in Oslo or Stockholm instead of in Tokyo. There are so many women on Japanese corporate boards that they actually surpass the Scandinavians in percentage of female board members. This, of course, has revolutionized the policies, mindset, mode of operation, and character of the Japanese corporation. Offices are mostly empty after 5 p.m., as are the bars and fancy watering holes to which Japanese businessmen famously resorted late into the night in the not-so-distant past. Company golf weekends have also become rarer and less lavish, replaced by family-oriented visits to nice resorts and child-friendly attractions. Also a thing of the past is the elaborate system of formal sign-offs (the *ringi* system) on new proposals by every corporate office. This has been replaced by Skype calls and quick approvals. In the wake of these changes, Japanese companies have become admired and feared for their bold, risk-taking attitudes and quick decision making.

Of the leading global companies in the Nikkei 1000 (formerly the Fortune 500), fully a quarter are Japanese. Partly this is because Japan now boasts the world's best business schools. For example, Harvard Business School is now ranked no better than number ten on the global scale, with Japan's Hitotsubashi, Keio, and Kyoto University business schools considered the top three and the European INSEAD ranked in the fourth spot.

The rise of Japanese business schools, along with the new role of women executives, has sparked dramatic shifts in corporate governance. The concept of necessary and adequate profit has replaced maintenance of employment as the main objective of the Japanese corporation. Beyond this, two shifts in the global economy have tended to favor Japanese management and economic doctrines and practices. Rather than becoming more interdependent, as long predicted, the world economy has tended to become somewhat less integrated and less globalized over the past thirty-five years. It has also developed more along the lines of China's part-state, part-market capitalism, as opposed to America's mainly free-market capitalism.

Contrary to the predictions of most experts in the period around 2015, global finance and production grew more nationally and regionally based, rather than

ever more globalized, over the ensuing years. Partly this was due to the impact of several financial crises in the early years of the century. For instance, the 2010–2014 euro crisis actually drove some members of the European Union to impose capital controls, making it clear to investors everywhere that financial integration without political integration was a recipe for disaster. Similarly, the collapse of the US real-estate bubble between 2006 and 2012 led to greatly increased and more nationally oriented regulatory measures. At the same time, China's push to make its renminbi (RMB) a reserve currency competitor to the US dollar tended to splinter financial markets further. The dollar had been as close to a global currency as the world had seen since the gold standard of the late nineteenth century, and the effort to substitute the RMB thus led in the direction of less, rather than more, globalization.

New technology developments such as 3-D printing, in concert with rising global wages, ever-increasing automation, and the imposition of carbon taxes, made the extensive global supply chains of the early twenty-first century more and more obsolete. With 3-D printing came the capacity to build a product like a car or a home, or almost any other device, using essentially the same technology used to print books. An operator simply takes cartridges of different materials (metal powder, ground plastic, etc.) and feeds them into the printer like ink. The printer deposits the materials according to a pre-programmed pattern and eventually produces a three-dimensional object—a lock, a hammer, a fork, or what have you. This process sparked a veritable revolution by reducing the importance of economies of scale while also automating or doing away with the necessity of assembly operations. It thus tended to move production of items as close as possible to the source of demand and away from low labor-cost locations because very little labor was involved.

The imposition of steep carbon taxes to offset the impact of pollution and to encourage development of alternative energy raised the cost of air and sea delivery, which also moved production closer to the source of demand. This all worked in favor of the Japanese, whose managers had always tended to control production directly instead of relying on extended and complicated global supply chains. And, it was, after all, the Japanese who had, in the 1950s, actually invented the government-backed capitalism that today is associated with China. Thus has the world moved Japan's way over the past two generations.

Another important element of the Japanese corporate renaissance has been its extension from manufacturing into the service sectors in which Japan

historically lagged. Now Japan's market share in hotels, insurance companies, banks, online retail stores, and other service industries is equivalent to its strength in manufacturing, and Japan's overall productivity leads the world.

Business visitors and tourists to Japan these days are also greatly impressed by the size and elaborate outfitting of Japanese homes, apartments, and condominiums. Large living spaces have given ordinary Japanese families room to have live-in domestic or elder-care helpers. In the 2020s, Japan fully abolished tariffs on imports and farm subsidies in accord with the rules of the Trans-Pacific Partnership free-trade agreement. Around the same time, the laws around land use, land taxes, and the transfer of property in Japan were modernized and made open and transparent, so that a true market in land and real estate came into being. A series of deregulatory measures transferred land used for small farming into residential or commercial farming use.

The Japanese had always argued that, as the country was densely populated with mountainous terrain, there was little land available for housing, and houses therefore had to be small and cramped. In the 1970s, these typical Japanese houses were referred to as "rabbit hutches" by a British trade negotiator—a description that became prevalent. Thus, today's first-time visitors familiar with long-held stereotypes are surprised to find that the combination of advanced smart transportation and the opening of the agricultural land to development has totally transformed the landscape. In place of the "rabbit hutches" are spacious homes surrounded by pleasant gardens. Because Japan has super-high-speed Internet connections throughout the entire country, telecommuting is prevalent, and most homes include fairly extensive office space. These larger homes require more furniture, appliances, and material of all kinds than were needed for the "rabbit hutches." Of course, this demand has also been a big factor in the country's rapid economic expansion.

The major factor in this growth, however, has been cutting-edge technology and the development of whole new industries often started by new immigrants to Japan. Whether in the field of biotech, nanotech, electronics, materials, aviation, chemicals, or software, Japanese researchers and corporations—as in the cases of medical and aircraft technology—are in the lead. Government and private-sector support of R&D now accounts for nearly 6 percent of Japan's GDP. But what has also made a major difference is the fact that this R&D is not random; rather, rigorous review at all stages of funding has made it extremely focused. Moreover, to facilitate and promote technology development, Japan offers bonuses to

leading technologists from around the world if they come to work in Japan. Skilled foreigners who move to Japan receive automatic Japanese citizenship, along with grants and assistance in acclimating to the Japanese way of life. This influx of foreign technologists, combined with the entrepreneurial efforts of many new-generation Japanese, has given rise to thousands of new companies and hundreds of entirely new industries centered mostly in Japan.

The increase in Japan's population and the boom in the economy have allowed Japan to avoid the problems of aging and austerity that have come to plague China, Germany, Korea, and most other major countries. As a result of continuous budget surpluses, the national debt has shrunk from 240 percent of GDP to 50 percent, while health-care costs have fallen from about 9 percent of GDP in 2013 to only 6 percent today. Considering Japan's still relatively large population over sixty-five years of age, this decline in health-care spending, accompanied by improved health-care results, has itself been a kind of economic miracle. Japan has become the envy of the rest of the world because no other country can match its record of improved health care with falling costs.

At the same time, Japan's expenditure on defense has grown from 1 percent of GDP to about 3 percent. This expansion began in 2014 when, in the wake of Chinese threats to the Japanese-administered Senkaku Islands, Japan redefined the extent of its defense powers under Article 9 of its constitution, which prohibited Japan from making war. This article had previously been interpreted to mean that Japan could only defend itself against direct invasion; it could not even provide support to an ally who might be under attack while defending Japan. The reinterpretation broadened the self-defense powers to enable cooperation with and support of allies. Later, the article was again redefined to allow Japanese forces to conduct forward defense and to support allies as part of such a defense. Under these reinterpretations, Japan now considers that it effectively has full sovereignty, including the right to go to war when vital national interests are threatened. The military buildup in response to China's buildup has turned Japan into the world's third-ranking military power, with a full nuclear arsenal and advanced cyberweapons, along with a panoply of international ballistic missiles. Its ships patrol the western Pacific, the Straits of Malacca, and the Indian Ocean. The combination of technological leadership, a booming economy, and military strength have made Japan an attractive alliance partner; most of the countries of East, Southeast, and South Asia, as well as the EU and the United States, have full security treaties or other security arrangements with Japan.

Japan's revitalized status in the world has greatly increased the country's already extensive soft power. In the 1990s, even as the Japanese economy was faltering, important parts of Japanese culture were adopted internationally. Sushi became a global food, *kanban* just-in-time delivery became a global management technique, karaoke became a global music form, and reading manga became a leading global pastime. Now, with Japan revitalized and booming, Japanese innovations in design, art, food, engineering, science, and much else are penetrating to the far reaches of the globe. The world's thirst for Japanese performers, professors, chefs, painters, writers, engineers, designers, composers, and scientists—not to mention its political, economic, and social analysts—seems unquenchable. What some hoped would be the Second American Century—and what many predicted would be the Chinese Century—has, in fact, become the Japanese Century.

None of this appeared at all likely just a generation ago. Indeed, in 2014 the prevailing view was that Japan was a national basket case in grave danger of implosion. It was predicted that by 2050 the population would have declined to only about 85 million people, with 40 percent over the age of sixty-five. Some suggested that the last Japanese person might die before 2300. The low birthrate was destroying aspects of Japan that many had always considered fundamental to being Japanese, such as robust families, children as the center of family life, filial piety, respect for and care of elders, and closely knit villages. Men and women delayed or avoided marriage; when they did marry, they had few or no children. The extended Japanese family disappeared as elder care became too burdensome. Thus, from the traditional extended family, Japan progressed to only a nuclear family and often to no family at all. With a shrinking and aging population, the cost of pensions and health care appeared prohibitive in the face of minimal economic growth and a national debt that was a crushing 240 percent of GDP. Japan's high national savings rate had always enabled the country to finance its own debt internally, but with savings falling and debt rising, analysts were predicting that Japan would soon have to sell its bonds to foreign investors. This, it was felt, would drive interest rates up and soon have debt service payments alone eating up three-fourths of the national budget before any other expenses could be covered.

The once-great Japanese corporations of the 1980s had become mere shadows of their former selves, with some near bankruptcy. Sony, formerly dominant in the electronics industry, had been surpassed by Korea's Samsung

and America's Apple, suffering loss after loss. In 2012, Japan's third-largest employer, Panasonic, suffered a US$10 billion loss—the biggest ever by a Japanese manufacturer—which led to the layoff of nearly 40,000 workers. Once world leaders, Japanese semiconductor makers Elpida and Renesas essentially went bankrupt in 2012 and had to be rescued. In the auto industry, Honda had become virtually an American company and Nissan had been flying in formation with Renault of France since the mid-1990s. The important innovations of Japanese management, such as *kanban* just-in-time delivery, *kaizen* continuous improvement, and six-sigma quality control, had all become global standards, but new management concepts were slow to emerge. Indeed, many observers noted that Japanese managers seemed slow to adopt the flexibility, hybrid approach, flat organization, and emphasis on innovation of other global managers in Korea, America, Germany, Taiwan, and Singapore. In place of Japanese management techniques, global business schools had begun using case studies of Sony and other Japanese companies to teach how to avoid stagnation, decline, and failure.

Ironically, Japanese business leaders who had been in the habit of criticizing American CEOs for outsourcing and offshoring jobs were now doing the same thing. Similarly, just as the Americans of the 1980s and 1990s had complained that the dollar was too strong, Japanese businesses in the early 2000s were complaining that the yen was too strong. Some analysts wondered whether the whole Japanese economic miracle of the 1960s and the storied virtuosity of Japanese management had been mainly a matter of an undervalued currency and a protected home market. It seemed that Japanese industry was unable to compete on a truly level playing field. In particular, it seemed to be failing at innovation. With a few exceptions, such as Softbank and Rakuten, the hot new ideas and companies of the early years of the twenty-first century like Skype, Google, Huawei, and Samsung came not from Japan but from Europe, the United States, China, and Korea. Smart young people with an eye to learning new things and advancing their careers and ideas flocked to America, China, and even to India, but not to Japan. Meanwhile, young Japanese, instead of traveling or studying abroad or learning English or Mandarin, seemed to stay more at home and to know less about the world than their parents did. It was said that Japan was so comfortable and pleasant there was no need or attraction for Japanese to leave. But clearly this was at best a partial justification, because a large number of young Japanese had become *hikikomori*, people who isolate themselves and stay at home, locking themselves in their rooms, unable to cope

with the pressures of living in Japanese society.

The terrible tsunami and subsequent nuclear-reactor radiation release of 2011 had dealt a hard blow to Japan. Not only were entire communities destroyed, along with much farmland, but all of the country's nuclear reactors—accounting for 25 percent of its total electric energy supply—were shut down. While a few were restarted, most were not, and this meant that Japan's dependence on high-priced oil rose dramatically in the years immediately following the catastrophe. With energy so expensive, the prospects were poor for production of anything requiring significant energy inputs.

To add insult to injury, between 2011 and 2012 China moved to humiliate Japan and to drive a wedge between it and the United States by taking quasi-military and even some overt military action against the Japanese-controlled Senkaku Islands (known in China as the Diaoyu Islands), which the Chinese claimed for themselves. In addition, China later encouraged and provided covert support for the independence movement in Okinawa, the site of most of the US military bases in Japan. Clearly China saw Japan as a state in terminal decline—one that could be pushed around as an example to others who might want to contest Chinese claims and power. The United States was bound by treaty to defend Japan against attack. Yet Washington desperately wished to avoid conflict with China, and tried to please all sides. On the one hand, the United States said that it took no position on the validity of the various historical claims to the islands. On the other, it said that it recognized the fact of Japan's present administration and the importance of not settling the issue by force. President Obama stated publicly in April of 2014 that the islands fell under America's defense umbrella. But many in Japan and in the rest of the world rightly doubted that the United States would actually go to war with China over anything that happened in the Senkaku Islands. And this doubt only further weakened Japan's position.

In sum, the outlook for Japan in 2015 was extremely poor in every way. Certainly no one imagined the reality of Japan's current position in 2050.

What happened? How did Japan change the trajectory of its future?

The purpose of this book is to answer those questions.

CHAPTER 2

2016—Year of Crises

In 2016, new population estimates for Japan painted a sobering picture. The 2010 census had estimated that Japan's population of 128 million would fall to 95 million by the year 2050, with all of Japan's forty-seven prefectures suffering population loss. In the hardest-hit prefectures such as Akita, Aomori, and Kochi, it was estimated that the population would decline by as much as a third. But even Tokyo was warned to expect a decline of nearly 7 percent. The new 2016 projection showed a much more dramatic decline, with the total population dipping below 88 million by 2050. Even worse was the projection for the aging of the population: in 2010 it had been expected that by the year 2040, people older than sixty-five would make up more than 30 percent of the population in each prefecture, with Akita, Aomori, and Kochi prefectures reaching a proportion of over 40 percent. But the new projection was that 40 percent of Japan's population would be over age sixty-five by the year 2050.

The social, economic, and national security implications of these numbers were almost unimaginable. Many Japanese had been comforting themselves with the thought that a smaller population would not be a problem. Indeed, it was often suggested that Japan would be less crowded and thus more comfortable and livable with fewer people. But a cold, hard look at the projections showed a rapidly approaching disaster. Within a very short time, one active Japanese worker would be supporting not only himself, but also one elderly person, as the size of the workforce fell from 87 million in 2010 to only about 52 million in 2050. The implications for pensions were dire. The pension system had been assuming returns of about 4 percent on investment. In fact, the actual returns had for some time been only about 2 percent, and there had already been the possibility that pension reserves would be entirely used up in about twenty years. But by 2016 it looked as if the cost of supporting the elderly would rise sharply. Between 1991 and 2000, social spending rose by about 50 percent. The new projections showed that the increase between 2000 and 2025 would be near 100 percent. With the population shrinking by almost 1 percent annually,

productivity gains would have to be in the 3 percent annual range to achieve GDP growth of just 2 percent annually. Yet this level of productivity had not been achieved in the past twenty years. Slow or zero GDP growth could not support the increased government spending that would be necessitated by rising retirement, health care, and elder-care payments.

Beyond the domestic economic consequences, these numbers had huge international and security implications. Could an elderly and frail Japan respond adequately to the challenges posed by a resurgent China? Could it continue to be an adequate ally to the United States or to the ASEAN countries? Could it even maintain its presence among the G7, G8, or G20 countries?

No matter how one looked at the numbers and the trends, they were disheartening. It seemed that Japan would be unable to avoid becoming older, poorer, sicker, and less secure while paying higher and higher taxes for fewer and fewer benefits. Japan appeared to be a dying country.

LIGHTS OUT

In the spring of 2014, the militant Sunni Muslim group known as the Islamic State in Syria and the Levant (ISIS, ISISL, or ISIL) broke out of its base in northeast Syria and quickly overran northwestern Iraq up to the very gates of Baghdad, while also threatening northern Saudi Arabia, Jordan, and parts of Turkey. At the same time, the United States and Iran appeared to be making rapid progress toward an agreement that would allow Iran to continue developing its nuclear-energy capability while still being barred from acquiring sufficient capacity to produce nuclear weapons. The combination of these two developments resulted in an unexpected shift in Middle East alliances. Because of its seminal role in the creation of the Shia Muslim state of Iraq after deposing the dictator Saddam Hussein, the United States felt a strong obligation to prevent the collapse of the new state. It also wished to maintain good relations with Tehran in order to conclude the nuclear deal. But longtime US allies Saudi Arabia, Israel, and Jordan all shared an existential fear of Iran and its surrogate Hezbollah forces in Syria, Lebanon, and northern Saudi Arabia. They deeply believed that Iran was bent on the overthrow and destruction of each of their governments. Consequently, in late 2016, Jordan and Saudi Arabia opened their airspace to Israeli bombers, which launched massive attacks on suspected nuclear facilities all over Iran. Tehran struck back by unleashing Hezbollah rocket attacks on

Israel from Lebanon, sinking vessels, and planting mines that closed the Strait of Hormuz to all outbound oil shipments. They also encouraged sabotage by Shia Muslims who, despite being a small minority of Saudi Arabia's mainly Sunni population, held the majority of the kingdom's vast oil fields and refineries along the western edge of the Persian Gulf. Overnight, the price of oil soared to US$300 per barrel, threatening to push Japan into a massive trade deficit and to completely stall the Japanese economy.

Because 80 percent of the oil and half of the liquefied natural gas (LNG) bound for Japan passed through the Strait of Hormuz, the closure of this passage threw Japan into a desperate situation. The government requested help from Russia, but Moscow replied that it had already committed to supplying China and had no additional capacity. Efforts to obtain increased supplies from Indonesia and Malaysia were also unsuccessful, as these countries wanted to ensure that they and their ASEAN colleagues would have a sufficient supply. In desperation, Tokyo turned to the United States in hopes of obtaining emergency imports of shale-gas-based LNG and shale oil. But despite having become energy independent as a result of the development of shale deposits, the United States did not yet have sufficient infrastructure to export substantial quantities of LNG.

To partially offset the loss of oil and LNG-fueled energy, the Japanese government began to accelerate the restart of its nuclear power reactors. These had nearly all been shut down in the wake of the 2011 tsunami-induced partial meltdown of the Tokyo Electric Power Company's (TEPCO) nuclear reactors at Fukushima. This action, which was necessary in order to carry out safety inspections, had automatically cut Japan's electric power production by more than 25 percent. Despite growing public opposition to nuclear power, by mid-2014 the government had completed most of its safety inspections and had begun the process of reactivating fifty-four closed reactors.

In early September of 2014, a panel of nuclear regulators had ruled that the Sendai power plant in southern Japan faced no risk from the several dormant volcanoes in its vicinity. On September 27, 2014, however, nearby Mount Ontake unexpectedly erupted, leading University of Tokyo professor and volcanologist Toshitsugu Fujii to warn that no one could accurately predict volcano eruptions, and that Japan was in danger of experiencing further volcanic disturbances that would endanger a number of nuclear power stations. Sure enough, in late 2016, Mount Sakurajima unexpectedly released a hot, fast-moving flow of gas and sediments that quickly knocked out both reactors at Sendai. This created

overwhelming grassroots pressure to shut down any reactors even remotely under the threat of volcanic eruptions. Thus, Japan returned to a state of severely restricted nuclear power supply.

THE END OF THE PAX AMERICANA IN ASIA

The years 2012–2016 brought a fundamental shift in the balance of power in the entire Asia-Pacific region. China's economy had become arguably the world's largest. Previously, China had been content to pursue economic growth while largely ignoring geo-political issues and ambitions. But all that started to change with its 2012 occupation of the Philippine-claimed Scarborough Shoal near the Philippine coast. Thereafter, China began to extend its growing power into the seas around it by asserting the "nine-dash line" of control (the sketched line segments on an old map now used by China to determine its area of rightful control), which included nearly all the islands and shoals of the South China Sea. In reaction to the 2012 purchase of the Senkaku Islands by the government of Japan, China asserted its own claim to the islands and began to challenge Japan's administration of them by sending fishing boats and other vessels into the islands' waters, as well as by practicing air-force fighter maneuvers in the area. In early 2014, China suddenly established a new Air Defense Identification Zone (ADIZ) that included the Senkakus, as well as reefs and islands claimed by South Korea. Later in the same year, it began oil-drilling operations in waters also claimed by Vietnam. These actions were accompanied by a rapid buildup of Chinese military forces, particularly shore-based anti-ship missile batteries aimed at eventually denying the US Pacific Command and allied forces committed to defending and maintaining stability in the region access to the waters within China's "first island chain" (Japan, Okinawa, the Ryukyus, the Senkakus, Taiwan, the Paracels, the Spratleys, and the Strait of Malacca).

All eyes had been on the United States to see how the longtime hegemon and guarantor of stability might respond, and a palpable unease could be felt in the region when Washington did not react strongly. In response to the Chinese occupation of the Scarborough Shoal in 2011, the White House had sent the secretary of state to Beijing and Manila to urge negotiations, but had taken no concrete steps to prevent or reverse the Chinese occupation. In what initially appeared to be a success for US diplomacy, China had agreed to talks with Manila. But as the talks dragged on and produced no result, China continued its

occupation, and Washington continued to watch. In the case of Japan's long-disputed—and then, in 2012, openly challenged—sovereignty over the Senkaku Islands, the United States had always held a nuanced position. It had several times stated that it recognized Japan's present administration of the islands and that it therefore was obliged to defend them as part of Japanese territory under the US-Japan Mutual Security Treaty. In other words, the Senkakus were considered to be under the US nuclear umbrella. At the same time, however, Washington said that it had no opinion on whether China or Japan had rightful sovereignty over the islands, and that such final sovereignty should be determined by negotiation between those two countries. When China announced its new ADIZ, the US Air Force sent two B-2 bombers through the zone without giving prior notice to Chinese authorities, thereby indicating that Washington did not recognize the legitimacy of the zone. However, Washington also advised US airlines operating in the region to abide by the new Chinese ADIZ.

To be sure, Washington had announced it was "pivoting to Asia" in 2012, but in view of these developments, many in the region wondered what the "pivot" really meant. This concern was only heightened when word leaked out of the Pentagon in late 2013 that, in order to avoid a confrontation with China that might pose a direct threat to the United States, as well as to cut costs and avoid excessive US federal budget deficits, the US was considering a possible withdrawal of US forces to China's "second island chain" (Tokyo Bay, the Bonins, the Marianas, Guam, Palau, and the Sunda Strait). No one in the region was sure whether America really intended to maintain its dominance in the Asia-Pacific region or not.

Then, in late 2016, warning shots from Japanese Self-Defense Force pilots aimed at Chinese fighters overflying the Senkaku Islands accidentally resulted in the downing of one of the Chinese planes. China responded by occupying Uotsuri Island, the largest of the Senkakus. Washington condemned the action and sent ships from the Seventh Fleet to patrol the vicinity, but took no action to dislodge the occupying Chinese. Instead, it urged Japan to negotiate with Beijing for a deal to share administration of the islands. Nor did Washington respond strongly to intelligence leaks pointing to Chinese support for an Okinawan independence movement. Clearly, the US-Japan Mutual Security Treaty had its limits in the case of confrontation with China.

Adding to Japan's concerns was the growing quasi-alliance between China

and South Korea. By 2014, China had become South Korea's largest trading and investment partner, and South Korea's largest *chaebol* corporate conglomerates were now heavily dependent not only on the Chinese market, but also on the country's technology and skilled labor. The United States, which still had formal command of the South Korean army under the terms of the US-Korea Mutual Defense Treaty of 1953, had been scheduled to transfer command to South Korean generals in 2015. But it advanced the transfer by a year to 2014, thus indicating that it wanted to be less directly responsible for the defense of South Korea. While these shifts were taking place, the relationship between Japan and South Korea was becoming more and more troubled. Korea continued to occupy the Takeshima chain of islets that Japan considered to be rightfully Japanese. Seoul continually rejected Tokyo's proposals for negotiation. A treaty negotiated in 2013–2014 to enable sharing of national security information by the two countries was rejected by Seoul at the last minute, meaning that the South Korean army could communicate with its putatively allied Japanese army only through the offices of the Pentagon. Underlying the growing coolness of the South Korea-Japan relationship were lingering issues from World War II, such as the drafting of Korean women by the Imperial Japanese Army to become sex slaves, or "comfort women," for Japanese troops. The flames of this and other wartime issues were fanned each time Japanese prime minister Shinzo Abe or his close associates paid homage at Tokyo's Yasukuni Shrine or appeared to be discussing the negation or rewording of Japan's apologies for the war.

The fact that China shared South Korea's resentment of Japan, and resented Abe's statements as much as—if not more than—Korea did greatly strengthened the growing bond between those two countries. The bond was further reinforced by the growing sense in South Korea that China was more important than the United States for keeping North Korea under control and for eventually opening that country to investment and production by South Korean firms. Thus, news from the Pentagon in late 2016 that the United States was planning to remove its troops from Korea virtually sealed the new China-South Korean alliance.

ABENOMICS IS NOT ENOUGH

By mid-2016, it was becoming clear that the economic policies of Prime Minister Abe—"Abenomics"—were not going to revive the Japanese economy from more than twenty years of stagnation and deflation. This bold program consisted of

what Abe called the "three arrows." The first arrow was aggressive quantitative easing, under which the Bank of Japan essentially created huge quantities of money; the second arrow was increased fiscal stimulus through greater government spending on infrastructure; and the third arrow was structural reform aimed at opening the agricultural sector to greater competition, increasing and elevating the role of women in society and in the economy, stimulating start-up of new businesses through deregulation, and reforming stultified corporate structures and practices. This had all been aimed at generating an inflation rate of at least 2 percent while raising GDP and productivity growth. The success of this policy depended on economic growth surpassing the hoped-for level of inflation. Otherwise, rising interest rates in the wake of rising inflation would expand the interest payments on government bonds to such an extent that they would eat up virtually the entire government budget.

Initially Abe's strategy seemed to work, at least to some extent. The yen fell by 25 percent and exports surged, along with export-related employment and corporate profits. The Nikkei stock average rose higher than it had been in many years. What looked like the beginnings of a construction boom seemed to be underway, and a wave of hope coursed through the Japanese public. But problems arose as time passed. In order to reduce the huge government fiscal deficit that was threatening to undermine the health-care and retirement systems, consumption tax was increased, which had the unfortunate effect of undercutting the growth dynamic. In addition, the weak yen gave rise to retaliatory action. The South Korean government intervened frequently and massively in the global currency markets to offset the impact of a weaker yen on Korean exports. To a lesser extent, Taiwan, Singapore, Malaysia, and China did the same, while the US Congress threatened to pass legislation aimed at providing offsets to currency-related import surges. Suffering from a continuing euro crisis that saw unemployment in countries like Italy and France rise above 15 percent, the EU also undertook a series of tough actions against import surges related to currency movements.

More fundamental were two additional problems. Government spending on public construction in Japan no longer provided significant stimulus to growth or a very good return on investment. So much of such construction had been done over the years that, with a few exceptions, essentially only low-payoff projects were left. Even more important, however, was the increasingly apparent failure of the "third arrow" of structural reform. While the Abe proposals had

been bolder than anything put forward in Japan in the preceding forty years, they were not bold enough, or at least not implemented in a bold enough way. Reducing corporate taxes, eliminating corporate cross-shareholdings, rationalizing the electricity production and distribution system, deregulating much agricultural production, reducing agricultural and a wide variety of other subsidies, increasing after-school activities for children so that mothers could work full-time, and trying to establish wages based on output rather than hours worked were all groundbreaking and necessary measures. Yet they proved difficult or impossible to achieve, and it was increasingly apparent that they would be insufficient to meet the goal of revitalizing the nation. Inflation had indeed risen, but there was little increase in real GDP growth, household incomes, or standards of living. New investment, production increases, and job growth remained sluggish. Citizens faced with rising costs and stagnant incomes were not happy. They began to fear that the aim of the government was to use inflation to reduce the cost of national debt. Because a large portion of citizens' wealth was invested in government bonds, this would threaten the real value of their savings and their retirement.

Fear caused pension funds, mutual funds, and other investors to sell off their holdings of Japanese government bonds and other yen-denominated assets. The government was reluctant to raise interest rates to stem the outflow, because with interest payments on public debt already eating up roughly 30 percent of government revenue, higher interest rates could threaten the government itself with bankruptcy. Instead, introduction of capital controls became a topic of discussion. Unfortunately, this had the effect of spurring further capital flight. The unthinkable possibility was becoming a reality: Japan would have to rely on borrowing from the International Monetary Fund (IMF) and put its economy effectively under IMF control.

UNADVENTUROUS YOUTH

Because it was a country with few natural resources and relatively little cultivatable land, modern Japan had been forced to fully exploit its human resources in order to achieve its position as one of the world's most advanced economies. Thus heavy emphasis had always been placed on education and maximum development of human capacity. As a result, Japanese students had always tended to do well on the standardized tests that are often used to make

international educational comparisons. The best known of these tests was the Program for International Student Assessment, or PISA, which was taken every three years by fifteen-year-old students in many countries starting in 2000. In 2012, Japan placed seventh out of the seventy-eight entities where the PISA was administered. These included city-states or micro-states with very small populations such as Shanghai, Singapore, Hong Kong, and New Zealand; however, if these were discounted, Japan placed third. This was far better than, for example, the United States at number seventeen. Moreover, the United States had seen its position decline over the years, while Japan's had remained steadily near the top.

Yet, in 2015, as Japan approached a quarter century of economic stagnation, and the iconic Japanese companies and industries of long standing disappeared or paled into shadows of their former selves, many Japanese began to wonder whether the schools were teaching and measuring the right things. In short, was the education system preparing young people to deal successfully with the world they would face? Some astounding surveys and statistics suggested that the answer might well be *no*. For instance, in early 2015, the Institute of International Education found that the trend toward fewer and fewer Japanese going abroad to study was continuing. In 2008, the number of Japanese studying in America (30,000) was only about 60 percent of the number that had been there ten years previously. In 2015, this number fell by 50 percent. In other words, compared to the 50,000 Japanese students who had been studying in America in 1998, there were now only 15,000. This was not because more Japanese students were going to places like Australia or China; those countries also reported declining numbers of Japanese exchange students. The fact was that in an age of increasing internationalization and globalization, the young generation had less and less interest in learning about the outside world, and was not as well-equipped to deal with it.

Research between 2000 and 2010 by university analysts for publishers like Benesse indicated that Japan's young people were now less adventurous and less willing to take risks than their elders. There seemed to be fear that with widening gaps in society between rich and poor, making a mistake at a young age could prevent one from moving up or could even push one disastrously down. Thus ambition was muted.

Furthermore, as media strategist Mariko Sanchanta wrote in 2013, quoting a top executive of a Japanese bank, "It is impossible to persuade young bank

executives to study abroad even if they are fully funded by the bank. They're concerned about falling behind their peers if they go overseas." Young people also seemed to think of Japan as safe and of other countries as dangerous. Books like Mitsuko Takahashi's *Don't Let Your Daughter Study Abroad*, published in 2007, fanned this fear. In a survey completed in 2012, the Ministry of Education, Culture, Sports, Science, and Technology had found that fully 60 percent of Japanese students were not interested in studying abroad. The main reason, cited by 52 percent of the students surveyed, was insufficient foreign language capability. This was closely related to the second reason, cited by 31 percent of students—inability to make friends and concern for the safety of the environment in which they might have to live. Thus, despite their high PISA scores, it seemed that a generation of Japanese students was being educated in such a way as to make them less capable of dealing with the outside world on which Japan's future depended.

This contrasted dramatically to the trends in most other countries, where the number of students studying abroad was multiplying rapidly. Thus, in 2011, even as the number of Japanese students in America was declining, the number of Chinese students there rose by more than 40 percent to 156,000. The total number of international students in the United States in that year was 723,000, an increase of about 5 percent from the previous year. Japan seemed to be going against the flow. Significantly, the decline was more pronounced among male than female students, reflecting the fact that corporate sponsorship of overseas study had declined sharply. Men were led to view overseas study as a greater risk to their careers than did women, perhaps because the women knew that the big corporations were not going to hire them in any case.

SONY MERGES WITH SAMSUNG

Throughout the 1990s and the first decade of the twenty-first century, the once-fabled companies of Japan, Inc. had steadily lost ground to competitors in Asia, the United States, and Europe. Number two Japanese automaker Nissan had to be rescued by bringing in a foreign CEO and forging a close joint venture and partnership with France's Renault. In 2012, once-mighty Panasonic recorded the biggest losses of all time for any Japanese company. Sharp and Toshiba also recorded record losses; while Hitachi managed to revitalize itself, it did so only by dramatically downsizing. Former semiconductor stalwarts Elpida and Renesas

came close to bankruptcy, and had to be rescued by some of their US competitors, along with the Japanese government.

Most significant, both symbolically and substantively, was the merger of Japan's fabled Sony with Korea's Samsung Electronics late in 2016. This was a huge shock for the Japanese public. Sony had for years epitomized Japanese industrial and technological leadership. While many old-guard Japanese companies had grown by establishing dominant positions in the relatively protected Japanese market and then branching out overseas, Sony had been global from the beginning. Its CEO and chairman, Akio Morita, had become fluent in English and prominent as an international statesman-CEO. While he had not always been in Japan's inner circle, he had always been in the world's inner circle; Sony, like Apple in its heyday, became synonymous with bold innovation, style, and quality.

By 2013, however, Sony had been looking and acting a lot like previously failing American companies such as Kodak and Motorola. It sold its headquarters building and began investing in new fields such as medical technology. It lost money in its traditional digital electronics, game, video, and mobile phone businesses, while making money on financial services and music. Traditionally regarded in the same way as a company like Apple, priding itself on the regular introduction of new hit products that created whole new industries, Sony hadn't had a hit in eighteen years, and seemed to be moving in a less global, more parochial, and less innovative direction.

A few hundred miles across the Sea of Japan in Korea, the situation was just the opposite. Whether it was smartphones, television sets, components, or flat-panel displays, Sony simply couldn't compete with the super-aggressive Korean giants. Rather than continuing to try to fight them, Sony decided to join them. In September of 2016, the company announced it was being taken over by Samsung and would henceforth be known as Samsung-Sony, or S&S for short.

INERTIA INTO ACTION

Since the Meiji Restoration in 1868, when Japan opened up to the West for the first time, the Japanese political system had evolved to resemble that of France. In both countries, a powerful central bureaucracy had come to monopolize taxation, spending, and regulatory powers at the expense of the regional prefectures over which it ruled. Indeed, the centralization in Tokyo was such

that, in addition to central government and political parties, virtually all major business, labor, academic, and media organizations maintained their headquarters in the city.

While Japan's economy was collapsing, its energy supply disappearing, and its security becoming increasingly uncertain, life at the local level was also ever more difficult and unbearable. Changing the location of a stop sign in Osaka, for example, could require obtaining permission from several Tokyo-based agencies. Parents spent half the day getting their young children to and from the very limited number of government-approved child-care facilities available. Older children in elementary, middle, and high schools were not being well prepared for the modern world because centrally regulated curriculums were outdated. On top of all this, the fear of nuclear accidents in vulnerable local areas sparked a grassroots political reaction that quickly evolved into a broader movement opposing the central government.

Clearly Japan needed a fundamental revitalization program. Could it develop such a program in the face of deeply rooted inertial forces? No one really knew the answer to that question, but history suggested that it was possible. Twice in the past century and a half, Japan had reinvented itself: once in the Meiji Restoration of the 1860s, when Japan had been forced to open up by Commodore Matthew Perry and his Black Ships; and again in the wake of World War II and the US occupation of Japan.

The crises now facing Japan were every bit as existentially threatening as those of the Meiji and post–World War II periods. Thus any renaissance program would have to be as revolutionary as the two forerunners, if not more so. It had become clear that half measures and delay were only exacerbating the problems. In light of this consciousness, after the national elections of 2016, the Diet legislated the creation of a kind of new Iwakura Mission, the Meiji-era task force that traveled abroad to find ideas for reinventing Japan. To this body, called the Extraordinary National Revitalization Commission, were appointed representatives from all elements of Japanese society—political, business, academic, regional, media, social, agricultural—and even some foreigners familiar with Japan. Their task, like that of the Iwakura Mission, was to develop a program for revitalizing the country.

CHAPTER 5

Japan Becomes an English-Speaking Country

You wake in the morning and turn on the TV for the news. You click the channel selector in search of CNN or the BBC or some other English-language broadcast, but you keep hitting the Japanese-language stations. Then you see it—the scrolling English subtitle line at the bottom of the screen. You don't need CNN. In fact, you can already feel your limited Japanese improving as you listen to the news presenter speaking Japanese and follow his words in English in the subtitle line. But you do want to hear the news in English as well, so finally you find the CNN channel. Surprise—here you get the opposite. A Japanese scrolling subtitle runs at the bottom of the screen. Now you can feel your Japanese reading ability improving.

Today you have a breakfast meeting across town, so you click off the TV, take the elevator downstairs, and catch a cab for Roppongi Hills. Your cabdriver greets you with a nice "Good morning" and then proceeds to tell you in fluent English all about his son's baseball team, his wife's gardening hobby, and the big fish his father just caught. You are astonished by the cosmopolitanism of Tokyo as it celebrates the mid-twenty-first-century mark, and you are surprised by the diversity of faces and languages you encounter. Actually, it was in the 2030s that a palpable shift began, as global corporations began moving their Asia headquarters from Hong Kong, Singapore, and even Sydney to Tokyo, Osaka, Yokohama, and Fukuoka. Of course, Tokyo had always been an attractive city to foreigners because of its high level of public safety, good flight connections to other major centers in Asia, flawless public services, unparalleled infrastructure, and good educational services. But it had always been behind Hong Kong and Singapore as an Asian headquarters city for global corporations, largely because of the language issue. Both Singapore and Hong Kong were English-speaking cities where global business executives and their wives and children could easily fit in and adapt to local conditions. They could even become active in the local

community. Not so in Tokyo and other major Japanese cities.

In the past, not many Japanese spoke English well enough to get beyond simple conversation, and very few of the foreigners living in Japan spoke any Japanese at all. In addition, written Japanese was so difficult that very few non-Japanese could live comfortably outside the expatriate community with its special clubs and go-betweens. Now, however, the situation is completely different, because Japan has become for all practical purposes an English-speaking country. Communication is now as easy as it is in Singapore, and perhaps easier than in Hong Kong. As a result, a wave of American, European, Southeast Asian, South American, Indian, and Chinese executive expatriates and their families now live in Japan. Indeed, because of the air pollution in Beijing and Shanghai, many global executives stationed in China leave their families in Japan and visit on weekends. All this has created demand for housing, autos, office space, schools, financial services, restaurants, and a multitude of other services that has contributed to Japan's economic revival.

ENGLISHNIZATION

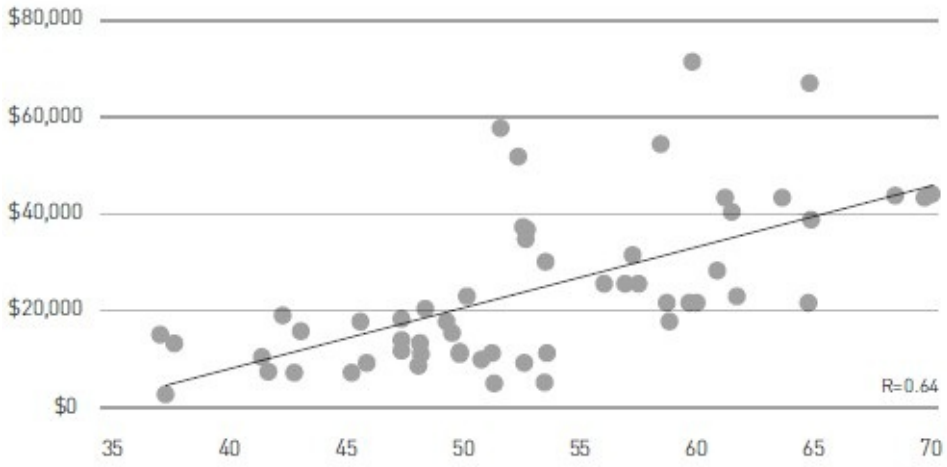
The effort to vastly improve Japan's English-speaking capability became a top national priority as the 2020 Tokyo Olympics neared. At the forefront of this effort were several of the business and technology leaders on the Extraordinary National Revitalization Commission—people such as Masayoshi Son, chairman of telecommunications corporation Softbank, and Hiroshi Mikitani, founder of e-commerce company Rakuten. Mikitani had hit the headlines in 2010 with his decision to make English the official language of his company, a process that was coined "Englishnization." Son, Mikitani, and their colleagues in the Commission realized how isolated and distanced Japan had become from the main streams of global innovation, discourse, and economic advance. They feared that this so-called Galapagos syndrome (a term originally used to refer to Japanese cell phones, which were so advanced that they had little commonality with mobile phones elsewhere in the world, and so did not actually serve as a means of communication except among Japanese) would eventually not only isolate but actually undermine the nation.

These Commission members argued that it was crucial to expand and improve English-language education, pointing to the research and activity of the Education First (EF) language-training company, which had identified a high

correlation between a country's English-language capability (as measured by EF's English Proficiency Index [EPI]) and its economic performance (see graphs overleaf). EF's calculations showed that English skills improve innovation, communication with suppliers and customers, and recruiting power—all of which contribute to a better export environment. Thus, with the exception of a few commodity-exporting countries like Saudi Arabia, the GDP grows and individuals enjoy a higher standard of living as English-language capability rises. Not surprisingly, EF demonstrated that, aside from those where English was the mother tongue, countries with the greatest English-speaking capability were largely European. However, it also made the surprising discovery that despite the lack of similarity between Asian languages and English, a number of Asian school systems were successfully turning out students who were very proficient in English.

ENGLISH AND INCOME

Gross National Income per Capita (USD)

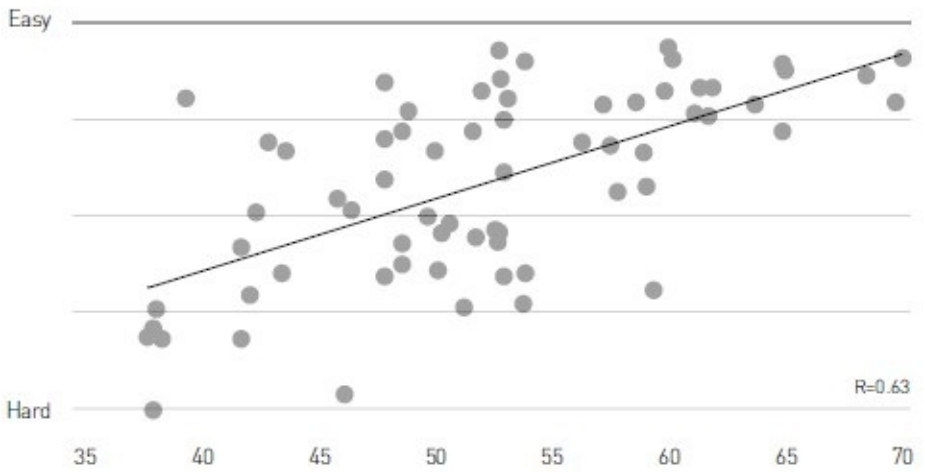


EF EPI Score

Source: World Bank, GNI per capita PPP($), 2012

ENGLISH AND THE EASE OF DOING BUSINESS

Ease of Doing Business Score

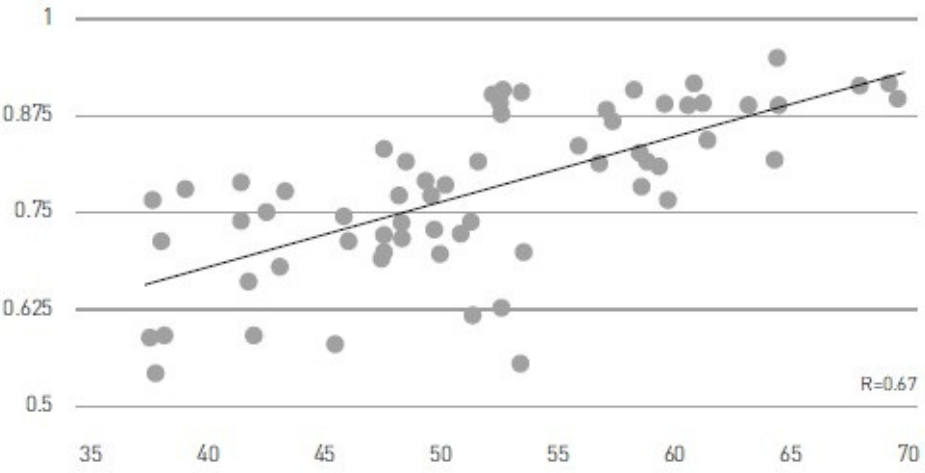


EF EPI Score

Source: World Bank and IFC Ease of Doing Business Index, 2013

ENGLISH AND DEVELOPMENT

Human Development Index (HDI)

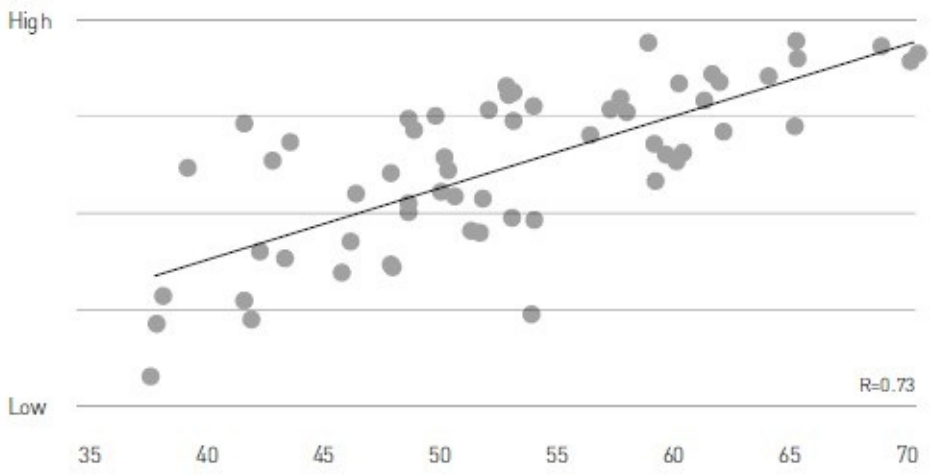


EF EPI Score

Source: United Nations Human Development Report, 2012

ENGLISH AND PROSPERITY

Legatum Prosperity Index

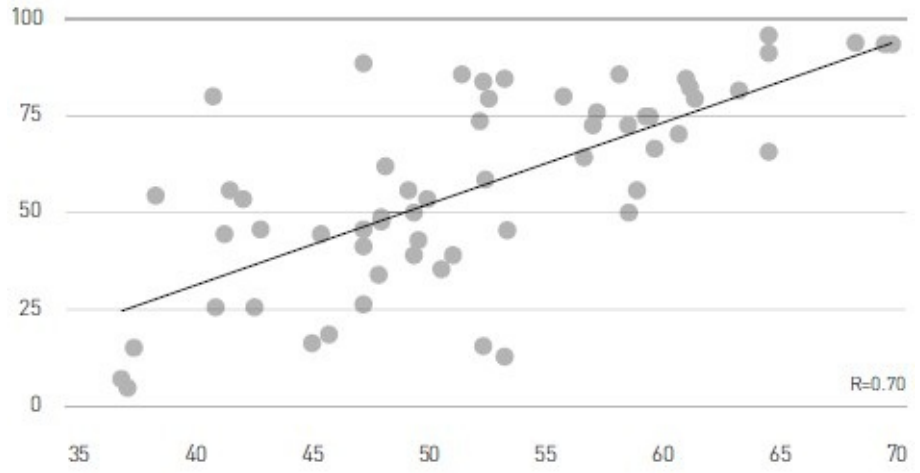


EF EPI Score

Source: Legatum Institute, 2013

ENGLISH AND INTERNET PENETRATION

Internet Users per 100 People

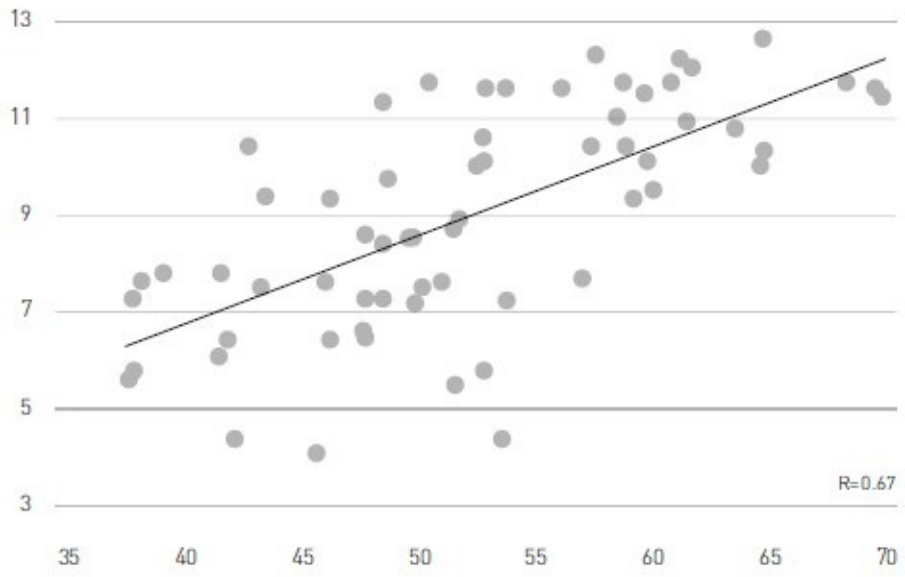


EF EPI Score

Source: World Bank, 2012

ENGLISH AND SCHOOLING

Average Years of Schooling



Source: United Nations Development Program, 2012

The EF EPI chart overleaf, published in 2014, shows Japan ranking twenty-sixth out of the sixty-three countries surveyed for English-speaking capability. This was not a terribly poor placement; Japan was ahead of France (twenty-ninth) and China (thirty-seventh). However, what the chart does not show—but what some of the Commission members were acutely aware of—is the fact that China, South Korea, Vietnam and others were making great efforts and were seen to be moving rapidly up the proficiency scale each year the survey was published. But Japan was not making any efforts to improve. Potential costs were enormous: difficulty in doing global business; reduced understanding of the global, political, economic, social, and technological environment; lack of awareness and subsequent undertaking of R&D and innovation; lower educational achievement; and less overall human development.

Of course, many in Japan had been aware of these kinds of correlations for some time but had never strongly felt the need to react. What the business and technology leaders among the Commission members now emphasized was that the problem was not just a matter of communication but also a matter of stimulating thought, discussion, problem solving, and new ideas through socializing. For example, they explained, the Japanese language was informed by Confucian principles and tended to compel a certain degree of indirection and deference in discussion between people of unequal status, whether the disparity was one of age, gender, or social position. Argumentation in Japanese could

easily be interpreted as a slight, or even a personal attack. Using the Japanese language made for consensus and social harmony, but perhaps also contributed to stagnation by impeding the innovation that comes out of the free, uninhibited exchange of ideas and opinions that is possible in a more egalitarian, practically oriented language like English.

Source: EF English Proficiency Index 2014

Some of the Commission members also had another aspect of the situation in mind. While manga had quickly spread to overseas markets, only a few Japanese novels, such as those of Haruki Murakami, were ever translated for foreign audiences. The Commission knew that there were great Japanese novelists and thinkers whose ideas were never communicated to the outside world. They knew that locked in Japan was the potential for great innovation, great new products and services, and great spiritual comfort. They also knew that the interaction of these Japanese concepts with those of other peoples around the world would unleash unexpected discoveries and benefits. All this, they argued, could be unlocked by English.

THE PROBLEM

Thus, the truth the Commission faced in 2016 was that Japan's level of English ability was inadequate for the country's future needs. Of course, the issue of how to improve Japan's English capability was not a new one. Indeed, it was a topic that had been addressed over and over again. Prime Minister Abe had called for making scores on the Test of English as a Foreign Language (TOEFL) an important part of the requirements for university entrance in early 2014. While this was a bold proposal at the time, it was only the beginning of what was really needed. There seemed to be two fundamental issues. One was that the focus of English teaching in schools had always been on grammar, reading, and translation of texts rather than on speaking, listening, understanding, and communicating. The main point was to pass the written language requirements of the university entrance examinations. So students were not really taught the language as a means of communication. The second issue merely compounded the failings of the first. It was that the vast majority of English teachers in Japanese schools could not speak English. They might be able to read it and translate it, but they could not readily understand spoken English or respond in spoken English, so their English instruction and explanations were all conducted in Japanese. The worst aspect of this problem was that it had been known for a long time. But each time suggestions were made to change the method and focus of teaching, the teachers themselves, perhaps fearful of losing their jobs, had strongly opposed any reform. A Ministry of Education survey in 2009 showed that of 29,524 English teachers in 10,029 middle schools, only 201 were native

English speakers. If part-time teachers were excluded, there were only 49 native English speakers out of 25,449 full-time English teachers at middle school.

To get around this problem, the government had initiated the JET (Japan Exchange Teaching) and ALT (Assistant Language Teacher) programs beginning in the late 1980s. These brought new university graduates from English-speaking countries to Japan to work as assistant teachers in preschools and elementary and high schools. In the peak year of 2002, a total of 6,273 foreign assistants participated in the program. While they were useful for purposes of teaching proper pronunciation and for interacting informally with students out of the classroom, they were not conducting the classes, and in most cases had no teaching experience. So the focus of most English classes remained grammar and translation, and the instruction continued to be mainly in Japanese. Some observers argued that the JET and ALT programs were wonderful for teaching foreigners about Japan, but not much use for teaching Japanese how to speak English.

The Commission again sent study teams abroad to find out what other countries were doing and found enormous emphasis on English teaching and learning virtually everywhere. They discovered that the countries with the highest English proficiency included Norway, Sweden, Denmark, Finland, Poland, Austria, and the Netherlands. With the exception of Poland, these were all small countries, and, with the additional exception of Finland, they all spoke a Germanic language with a relatively close relationship to English. Nevertheless, they all carried out comprehensive programs to achieve English proficiency. To begin with, all English teachers were fluent in the language. Instruction often began at preschool, and had in all cases begun by the third year of elementary school. It continued through all high school grades until age seventeen or eighteen. English classes were conducted mainly in English, and the emphasis was on total communication performance, so that by the time of graduation from high school, students were capable of reading, writing, translating, speaking, and understanding the spoken language.

Perhaps more important than classroom instruction, the study group found, was the contact that young people in these countries had with English in their everyday lives. In most non-English-speaking countries, American, British, Canadian, and Australian movies, TV programs, and news events that were broadcast domestically were dubbed from English into the national language. But in the Netherlands, the Scandinavian countries, and Finland, the programs

were often broadcast in their original English with Dutch, Finnish, Danish, Norwegian, or Swedish subtitles. Thus the citizens of these countries were constantly listening to English in a wide variety of circumstances while simultaneously reading the translation in their native language. It was as if they had a constant twenty-four-hour language-laboratory session. In addition, because computer games, pop music, Internet activity, and mobile phone apps in these countries were often in English without translation, young people were practically living in a bilingual environment. Indeed, many of them actually were, because their parents, having been educated in the same way, were fluent in English and would often speak English at home. Many universities in these countries also gave instruction in English to the extent that a degree in almost any discipline could be obtained entirely in classes conducted in English. In other words, a student from any country could obtain a university degree from, for example, a Swedish university, without any knowledge of Swedish.

A final point with regard to the countries most proficient in English was that most of their students traveled or studied abroad at some point during their education, either to the United States or some other English-speaking country, or to a country in which the common language for the students and the locals was English. For example, Swedish students studying in Germany would probably converse with Germans in English. So there was a great opportunity and necessity for speaking English just in the course of everyday living.

The Commission discovered that other countries that were highly proficient in English included Belgium, Estonia, Hungary, Germany, Poland, Singapore, Malaysia, Slovenia, Latvia, Argentina, Romania, and Switzerland. All of these countries shared many of the attributes of the most proficient countries. While (with the exception of Belgium) they did not show original English-language movies and TV programs in English with subtitles in the national language, they did put great emphasis on English teaching by English-speaking teachers, and their students also traveled extensively abroad.

The Commission was particularly interested in the cases of Singapore, Malaysia, and India, as these were Asian countries whose native languages were not at all similar to English; their cultures also varied substantially from Western cultures and from each other. All of them, of course, shared the legacy of having been part of the British Empire, but other countries like Myanmar and South Africa that had also been part of the empire lacked the same level of English proficiency. What all the high-proficiency countries had done, however, was to

make English an official language of the state. Thus, in Singapore, English, Malay, and Chinese were all official languages. In India, official languages included English, Hindi, and a few others. This meant that all official documents and statements were issued in English, that all interactions between citizens and the offices of the government had to be available in English, and that the media of the country had to publish and broadcast at least partially in English. In fact, all these countries were multi-ethnic, multi-religious, and multi-lingual, and English had become their lingua franca. In particular, English was the language of business in those countries—in fact, this was the case in most countries, as the world economy had become increasingly globalized and integrated.

The Commission found South Korea's approach to English education extraordinarily interesting. In the first half of the twentieth century, the majority of Koreans had been unable to read or write even in their own language, let alone a foreign language. Beginning in the late 1940s, Korea had launched a massive literacy and education catch-up effort that carried it to the top of the international education sweepstakes, with over 70 percent of its students entering university—far more than in any other country. With regard to English learning, South Korea had early on recognized that English ability was a key to global business competitiveness, and had made massive efforts to improve English teaching at home and to send as many students as possible for at least some study time abroad. Thus the number of South Koreans studying abroad had grown from practically none in the 1960s to 250,000 in 2013. Indeed, so anxious were South Koreans to have their children become fluent English speakers that it was common practice for South Korean mothers to move with their children to Australia, New Zealand, or the United States during the school year, while fathers stayed at home to work. Nor was South Korea the only example. The annual number of Chinese studying at universities in the United States, Britain, Australia, Canada, and New Zealand topped 350,000 by 2013. This was in stark contrast to Japan, where the number of Japanese students studying abroad was falling dramatically, from 82,945 in 2004 to only 58,060 in 2010. Indeed, it seemed that as other nations became more globalized, Japan focused ever more inwardly.

One of the members of the Commission was actually an American who had had long experience as a trade negotiator with Japan, and who had been appointed in order to lend an outside perspective to the Commission's work. He also had substantial experience in South Korea as well as elsewhere in Asia, Europe, and Latin America. He noted that as a result of their emphasis on

English and their study periods abroad, South Koreans and South Korean businesses were not only better able to interact with foreigners than Japanese, but were also better able to integrate non-Koreans into the Korean business environment than Japanese could integrate non-Japanese into the Japanese business environment. Samsung, for example, could readily incorporate American engineers and executives into its development and marketing teams in Seoul. Moreover, educated South Koreans were avid readers of the English-language press and technical journals, and could easily exchange views with people in other countries. They could easily establish contacts and relationships in new markets and with new organizations. The consequences of all this became apparent in the loss of Japan's leadership in key global industries as companies like Panasonic, Nissan, Toyota, NEC, Sony, and Toshiba found it increasingly difficult to compete with their South Korean rivals. It was this phenomenon that prompted Rakuten founder and CEO Hiroshi Mikitani to sound an urgent warning in 2012 in his book *Taka ga Eigo*, or "Englishnization." There he signaled the dire facts of twenty-first-century life to his countrymen, pointing out that competition of all types, but especially economic competition, was more and more global. In order to be competitive, corporations would have to hire not just the best Japanese workers, but the best global workers. They would have to exploit not just the best Japanese ideas, but the best global ideas. He noted that Japan's population was shrinking, and that its economy as a share of the global economy was also shrinking. Just to remain alive, therefore, Japanese companies would have to do more and more of their business outside of Japan. If they were going to be successful in foreign markets, Japanese executives would have to be very capable in English. Mikitani further explained that Japan's past success as an exporter in the global market had been based on its ability to supply outstanding manufactured products. In this case, the products were the main interface with the customer, and their good quality, good design, and fast delivery were self-evident. But in the future, the economy would become more and more service-oriented, and the services wouldn't explain themselves so easily. They would have to be introduced and maintained through more personal interaction. At the global level, that would require much better and broader English capability than Japan had at the time.

In his book, Mikitani used his experience with his own company to show what could and must be done. He described in detail how in the early years of the twenty-first century Rakuten had adopted English as its corporate language, even for internal communications and presentations that took place in Japan among

only Japanese. He showed how his company had undertaken to train all its employees in English and to move them to the green zone of proficiency on the Test of English for International Communication (TOEIC) within two years. He had concluded the book by urging other companies—and, indeed, the whole nation—to adopt a similar drive.

THE CURSE OF ENGLISH

While Mikitani didn't say so, it was well known that historically there had always been a feeling in Japan of essential and unbridgeable differentness from other countries with regard to language and culture. This sense had been accompanied by a strong concern for the need to protect Japanese culture and the Japanese way of life from erosion or contamination by contact with foreign elements. Indeed, Mikitani himself had often suggested that one reason the Tokyo authorities established the Japanese English-learning system in its nonfunctional form was actually to prevent Japanese from learning it well enough to enable them to escape from the "Galapagos" environment of Japan. So, in a way, the Japanese language in itself had been used as a means of preventing the "Japanese way" from being overwhelmed by Western influence over the past two hundred years.

Yet it was increasingly clear that Japanese culture and the "Japanese way" had their own exportable and overwhelming elements. Sushi had become a global dish, karaoke was as popular in New York as in Tokyo, and *kanban* (just-in-time delivery) had become an English word widely used in manufacturing operations around the world. Japan had become virtually synonymous with outstanding quality control, while the whole concept of fast food that had originated in Japan (think sushi, instant noodles, baked potato-wagons) had now swept the world (even France). Japan was widely admired as a safe society in which things worked and ran on time. It may have been prudent to think about protecting Japanese culture and national mores from sudden inundation by Western ideas and values in the nineteenth and early twentieth centuries. But in the twenty-first century the challenge was not protection but revitalization and globalization; for this, the mastery of English was as essential, just as the mastery of Western science had been during the Meiji period.

WHAT HAD TO BE DONE

Based on these findings, the Commission made a series of recommendations aimed at achieving the goal of equaling Germany in English-speaking proficiency by mid-century. Germany was chosen because it was a large, advanced country like Japan with a level of English capability that was good, but not impossibly high. There seemed little hope that Japan could equal Scandinavia's English-language capability. But maybe it could come close to Germany.

The first step was to have all English teachers in Japan take the TOEIC or the TOEFL. Those who scored in the green level, indicating good proficiency, were cleared to continue teaching. All others were either asked to take retirement or to undergo intensive training to elevate their scores to the green level within one year. To replace retiring teachers, Japanese who had lived and studied abroad in English-speaking environments were recruited by municipal governments and assigned to help with teaching at local schools. They were assisted in this recruiting by the Keidanren (Japan Business Federation) and the Japan External Trade Organization (JETRO), which had extensive ties to Japanese people living abroad.

At the same time, the JET program was revitalized to bring not only thousands of native English-speaking college graduates to Japan as teacher assistants, but also to bring a large number of fully qualified professional English teachers from English-speaking countries. In addition, online programs for teaching English were made widely available to schools and students so they could take advantage of the resources and native language speakers available worldwide. The school curriculum was modified so that simple English instruction began in child-care centers and continued through the entire twelve years of elementary, middle, and high school. Online teaching programs also made it possible for students to undertake extra English study at any time. With financial support from domestic and overseas foundations, each Japanese second-year high school student was offered the opportunity to study for one year at an English-speaking high school abroad. Whether or not the students availed themselves of the opportunity, they were required to reach the TOEIC proficiency level as a condition of graduation from high school.

In the corporate world, each company with more than 100 employees was urged to adopt a five-year plan for making English the corporate language, and the government set a target of having all such corporations conduct most of their

day-to-day business in English by 2020. By the same token, the ministries and other Japanese government bodies were directed to implement the same kinds of measures. Proficiency in English was also made a requirement for obtaining a job in the Japanese bureaucracy.

As the 2020 Tokyo Olympics approached and the practical need for greater English capability in conjunction with the games became evident, legislation was adopted to establish English as an official language of Japan by 2025. This meant that all publications, forms, public signs, and other official statements had to be available in English as well as Japanese. It also meant that speeches in the Diet and at other official events could be made in either English or Japanese. Universities were required gradually to teach more courses in English, until by 2025 they reached the goal of being able to grant their degrees to students who had followed the curriculum in either English or Japanese. This would be in imitation of Beppu's Ritsumeikan University, which had already been offering such an opportunity in 2013. Non-Japanese students were encouraged to enroll and take their degrees at Japanese universities along with Japanese students who were doing their studies in the English language.

Perhaps most revolutionary was the Commission's recommendation to do away with dubbing and to emulate the Dutch and the Scandinavians in their practice of subtitling television programs, movies, and other broadcast and Internet productions. Thus programs in Japanese would have English subtitles, and those in English would have Japanese subtitles. In this way, Japanese viewers, like their counterparts in the Netherlands and the Nordic countries, would be fed a constant diet of English in one of the most easily digestible forms.

It took a while to get this organized, not least because there was initially just a huge shortage of translators and subtitle writers. But automated translation evolved to help enormously, and by the early 2020s most Japanese were finding it much easier to understand and be understood while traveling abroad. As a consequence, the number of Japanese taking overseas trips and extended stays abroad rose dramatically. At the same time, non-Japanese-speaking people could travel virtually anywhere in Japan and be fully conversant with what was happening in the country by reading the subtitles and listening to Japanese media.

THE UNEXPECTED BLESSINGS OF ENGLISH

By 2030 Japan had made enormous steps toward becoming a more or less completely bilingual country. This was already having unexpected and revolutionary ramifications—most significantly for the Japanese government bureaucracy, the Diet, and the overall governance of Japan.

The bureaucracy had always had great discretionary power in Japan. This was partly because the traditional philosophy of governance was that anything not specifically authorized was forbidden, which compelled the citizenry to be always asking permission. This kind of thinking was in contrast to systems such as those of the United States and the United Kingdom, where no permission was required unless something was specifically forbidden. The Japanese bureaucracy was also powerful because Japanese laws tended to be written by the bureaucracy, and were drafted with broad provisions to be filled in with specific ordinances later by, of course, the bureaucracy. The power of the bureaucracy was also partly a result of the fact that Japanese citizens customarily did not question their lawmakers and bureaucrats: the inoffensive vagueness of the Japanese language and the Confucian principles embedded in it inhibited questioning of the high-status Diet members and bureaucrats by mere lowly citizens. The bureaucracy was also immune to pressure from outside Japan because most foreigners didn't understand and couldn't read the antiquated and complex Japanese of the law and legal documents. Indeed, many Japanese complained that even they could not fully understand such writing.

By the 2040s, the widespread knowledge and use of English and the requirement that all laws and regulations be published in English had changed all that. When they wished to be direct but non-confrontational, Diet members sometimes debated and asked questions in English. Ordinary citizens and journalists did the same thing, as, of course, did foreigners. Because leaders were now debating and publishing in English, it had become much easier to point out illogical statements and ambiguous discretionary decisions. Now there was nowhere for the politicians and the bureaucrats to hide.

More broadly, the change in Japanese society was remarkable. Japanese leaders became very polished in their discussions and presentations in international gatherings. Japanese entrants in global debate contests became numerous, and frequently won. More Japanese papers were cited in academic journals and articles. Japanese prime ministers became major figures at the G20 and G7 meetings; Japan was admitted as a full permanent member of the UN Security Council, while Japanese also began to fill the top spots of many other

international organizations.

The widespread use of English also helped business discussions become more frank and productive, and business collaboration both within Japan and between Japan and other countries unlocked unexpected innovation and growth, just as some of the Commission members had anticipated. Furthermore, as anticipated, Japanese authors, teachers, writers, athletes, medical doctors, entertainers, and others found a global market for their talents.

This all created a tsunami of money into Japan that helped fill the government coffers as well as private accounts. Because of the strength of its institutions, its open and transparent system, and its convertible currency, Tokyo surpassed Hong Kong and Singapore to become the major hub of Asian finance, just as London was the hub of European finance.

Now that English had become a viable medium of communication for serious business in Japan, the demand for Japanese medical services exploded. Japan's medical system was already known as one of the world's best, and the country was famous for the longevity of its people. But, as with finance, the difficulties of language and communication had always inhibited non-Japanese from seeking medical help in Japan and kept the Japanese from offering it. But now, sophisticated medical facilities that had been overbuilt and substantially underused for many years in major cities were in high demand. For a long time, so-called medical tourists (patients seeking treatment outside their home country) had been traveling to Asian centers such as Singapore, Bangkok, New Delhi, and Bangalore. Now these centers suffered a decline in patients as those seeking treatment increasingly took the road to Japan. Furthermore, students and practitioners followed suit: Japan's medical schools were suddenly full of students from all over the world who were bent on getting their medical degrees from world-class Japanese institutions. Drawn by the excellence of Japan's laboratories, technicians, high-speed communications, and other support facilities, many of the world's leading doctors and medical scientists moved their practices and main offices to Japan.

What was true of bankers and doctors was also true of scientific researchers more generally. Since the mid-1990s, Japan had been spending more than 3 percent of its GDP on R&D, putting it among the top two or three countries in terms of support for science and engineering. Despite the huge investment, Japan had gotten relatively meager returns. With the increase in English-language capability, however, this changed dramatically. Global companies rushed to

establish labs in Japan, and the number of scientific papers co-authored by Japanese and non-Japanese researchers soared, as did global Japanese patent applications along with all other indices of scientific and engineering activity.

The situation was similar with regard to food. Always a center of culinary excellence, Japan became the unquestioned mecca of global gourmets. No self-respecting chef could neglect a period of training in Japan, and no restaurant with any hope of world recognition could afford not to have Japan-trained people in its kitchen.

As noted in the previous chapter, Japan had adopted a policy of regulated but more open immigration, and had even begun to recruit immigrants with special talents from other nations. This would have been impossible without the Englishnization policy. Not only did it facilitate recruiting, but many of the people who came for educational, medical, or business reasons ended up staying in Japan because of its comfortable living environment. Many of them took Japanese spouses and had children who, thanks to the abolition of the old *koseki* family registration system and the implementation of the new rules for citizenship (see chapter 4), were granted Japanese citizenship and became part of the new population wave.

In spite of its longstanding fear that its culture might be overwhelmed by outside influences, Japan found that English was not only the means by which Japanese culture could be defended, but was also a way for Japan's culture to be globalized and thereby contribute to at least the partial "Japanization" of other societies. English was not a threat but a vital key to the survival, revitalization, and new success of Japan and Japanese culture. Rather than being a curse, English turned out to be a blessing.

CHAPTER 8

From Japan, Inc. to Germany with Japanese Characteristics

You're a bit disappointed at the decline in the number of bars and late-night drinking establishments since your last visit—the kinds of places where pretty hostesses would serve high-priced drinks and sit on the laps of executives sipping with their bosses late into the night. You've noticed that the lights don't burn as late as they used to in the offices and that the bars of yore have been replaced by family restaurants, or food retailers selling to couples hurrying home to dinner with their children.

No doubt the peculiar manners of the old Japan, Inc. had their rhyme, reason, and charm. But over the quarter-century from 1990 to 2015, the fabled Japanese corporations—the ones that had conquered world markets after the Second World War and turned "made in Japan" into a symbol of quality, style, service, innovation, and value—faltered. Nissan was only able to save itself by establishing a partnership with Renault of France. In 2012, once-mighty Panasonic recorded the biggest losses of any Japanese company in history. Hitachi exited hundreds of businesses and had to slash employment by nearly 100,000 employees to save itself. Former semiconductor giants Elpida and Renesas came close to bankruptcy. Even the great juggernaut Toyota suffered some decline of market share.

Most significant, however, was the late 2016 announcement by Sony that it had accepted an offer to become part of South Korea's Samsung, forming a new company that would be called Samsung-Sony. This was truly stunning. Founded in the wake of World War II by Japanese entrepreneurs Akio Morita and Masaru Ibuka, Sony had come to epitomize all the globally perceived virtues of Japanese industry. Starting with a license on unused US transistor technology, the company had led the Japanese conquest of American and European consumer-electronics giants like RCA, GE, and Philips with its Trinitron televisions and Walkman music players. Morita had transplanted himself to the United States

and learned English to become one of the first truly global CEOs.

But with the passing of its founding generation, Sony seemed increasingly to lose its way. It started making "me-too" products and insisted on developing virtually all of its technology in house, often figuratively reinventing the wheel rather than adopting and adapting already-existing technology from outside. It developed powerful internal silos, each of which was primarily focused on preserving its own existence and none of which spoke with any of the others. Coordination tended to take place only at the highest level, and by the time issues became apparent, it was already too late effectively to address them. The company became unwieldy, unfocused, bureaucratic, and increasingly afraid to take risks and to make critical investments. Although it possessed world-class flat-panel display technology, it hesitated to invest in this area, even as its South Korean rivals Samsung Electronics and LG Electronics forged ahead with massive new capital spending programs. Similarly, in television, while Sony dithered, Samsung invested. In the smartphone business, Sony's joint venture with Sweden's Ericsson lacked the vision and responsiveness to face challenges from competitors, first from Apple and its iPhone and then from Samsung with its Galaxy series of Android phones. Despite its reputation for being global, Sony found it difficult to bring foreign experts into the home offices to provide cross-fertilization for its own teams. Indeed, because of the silos within the company, even collaborative work between internal groups was limited.

Ironically, by 2013 Sony was looking and acting a lot like failing American companies such as Kodak and Motorola. It sold the building where its headquarters were housed and began investing in new fields such as medical technology. It lost money in its traditional digital electronics, game, video, and mobile phone businesses while making money on its secondary businesses in financial services and music. Founded as a company that might have been called Japan's Apple, and once taking great pride in regularly introducing innovative products that created whole new industries, Sony hadn't had a hit in eighteen years. Indeed, it had all the technology to be first to introduce things like the Apple iPhone and iPad—those products should have been the Sony iPhone and the Sony iPad. But Sony hesitated, and Apple seized the opportunity. By doing so Apple became the world's most valuable corporation, while Sony's value declined dramatically.

As it turned out, mobile phones proved to be the decisive turning point for Sony. Once a pioneer in the business, in 2001 Sony had embarked on a joint

venture with Sweden's Ericsson in a bid to maintain its global competitiveness. In 2007, its global market share had been more than 10 percent. By the end of 2012, however, that had fallen to 1.7 percent, putting Sony far behind Samsung's 22.7 percent. Sony's leadership resolved to make a major effort to regain significance in this market, which was of such great importance to a wide range of electronic technologies. The company put everything it had into development of the new Experia Z model, introduced early in 2013. It was a superb product, and initially sold extremely well; for a short time, there was a sense of euphoria at Sony headquarters in Shinagawa. But then Samsung introduced the new Galaxy S5. Not only was this phone technologically a step beyond all other phones, including Sony's, but Samsung executed a massive global marketing campaign that overwhelmed its competitors, with the single exception of Apple—and even Apple's market share fell by 25 percent.

Not only was Sony unable to compete in the phone business, but its other divisions—including television, gaming, and electronics components—were all facing the same kind of onslaught from the agile, super-aggressive Korean giants. Rather than continuing to try to fight them, Sony decided to join them.

THE ORIGINS AND EVOLUTION OF JAPAN, INC.

The decline of so many leading companies raised serious questions about the efficacy and viability of the long and widely imitated Japanese management system. Was it really an effective system for running businesses, or had it succeeded only because it existed within particular circumstances at a particular time?

The key elements of this system were lifetime employment; boards of directors consisting exclusively of a company's top managers; company membership in a powerful corporate group that maintained cross-shareholdings; primary funding from banks with cross-shareholdings in the group rather than by outside investors; emphasis on market share rather than profit; absence of a market for corporate control; relatively small differences between worker and manager compensation; and seniority-based promotion and pay schedules. Not all of these had been longstanding features of Japanese corporate management. From the late nineteenth century into the 1930s, Japanese capitalism and Japanese management closely resembled systems in Europe and the United States. Up to and during World War II, Japanese corporations were typically

owned and controlled by their shareholders. Corporations financed themselves by means of internal cash flow and issues of shares. Banks did not play any major monitoring role. By the 1930s, the large family-controlled conglomerates known as *zaibatsu* had emerged as a major part of the Japanese business scene—just as "trusts" had done in early twentieth-century America before antitrust laws had broken up many of them. The *zaibatsu* families used holding-company structures and teams of professional managers to run their enterprises.

An ongoing management problem in this period was that of finding and retaining skilled workers and managers. Frustrated by the fact that they would often invest a lot of time and money in training employees only to see them take their new skills to another company, some of the larger corporations introduced the idea of lifetime employment contracts. Managers and some skilled workers were guaranteed lifetime employment and continuing training, along with pensions and other benefits, if they promised not to leave the corporation. By the end of the 1930s, a number of the larger groups and companies were offering lifetime employment, although the majority of the business community was not.

Attempts to organize labor unions at this time were stymied by parliamentary opposition to union-authorizing legislation, as well as by the organization of factory councils by corporate management. During the Second World War, the few unions that did exist were absorbed into the Industrial Organization, the government body directing industrial wartime production, which effectively abolished them.

Of course, the wartime economy greatly increased the role of the government, and especially that of the Ministry of Munitions, in regulating and directing the production and supply activities of the corporations. But the management system that came to be known as Japan, Inc. was really birthed by the American Occupation, which had dissolved the *zaibatsu* by having the government buy their shares, imposing capital levies on the wealthy owners, and nullifying wartime guarantees of corporate borrowing. These steps inevitably greatly enhanced the importance of government officials and professional managers (as opposed to shareholders) in running the major corporations.

With very little private capital available, investment had to be done on the basis of bank lending backed by the government. The banks thus essentially became arms of the Bank of Japan and the Ministry of Finance, which imposed capital controls and directed the banks to lend to designated priority projects. The corporations came under the strong influence of the Ministry of

International Trade and Industry (MITI), which controlled access to foreign exchange and largely determined the priority of investment projects.

High growth was achieved on the basis of lending backed by the Bank of Japan and by the flow of funds from the government's Finance Investment Loan Program. Indeed, the banks were kept in an over-loan situation, with lending to corporations being as much as eight or nine times the amount of invested capital. Thus, the interest that companies paid to the banks was far more important than the dividends it might pay on its shares. Consequently, the shareholders of the corporations became far less influential and powerful than their managers and bankers. Indeed, management propagated the notion that it should not only be in control, but that there should never be a change of control from outside its ranks. Corporate managers also adopted the lifetime employment concept, but broadened it into a corporate family framework that provided an equalizing element between management and employees. In other words, management and "regular" (permanent) employees were all identified as part of the same lifetime-employed family, with strong ties and obligations to each other, but with no need for outside unions and no obligations to outside shareholders. In this way, management, in partnership with the powerful government bureaucracy and docile lifetime-employed labor, became the driving force of the corporation. Regular shareholders were left in limbo.

Actually, labor was not initially cooperative. One of the first actions Occupation authorities had taken was to adopt a trade union law that for the first time allowed workers to organize, strike, and bargain collectively. This resulted in a rush of labor organization; by the end of 1949 nearly 60 percent of all workers were in a trade union.

The advent of the Cold War changed everything, however. Instead of continuing to push democratization and unionization, Occupation authorities aligned themselves with the conservative forces in Japan, opposing liberal labor and socialist elements. The old *zaibatsu* were reassembled, but in a new form known as *keiretsu*, which were no longer controlled by a family or large shareholder, but by a council of CEOs of companies with cross-held shares and with the same main bank. The *keiretsu* were subject to government influence known as "administrative guidance." Under this new alliance, Occupation authorities broke strikes and worked with corporate management and conservative government and Diet leaders to break the power of trade and industry-wide unions and transform them into individual company unions

(heirs of the factory councils) that also could form federations of company unions. The essence of the arrangement was that management would assure lifetime employment, at least for regular employees, and that management pay would not be vastly greater than wages. For their part, workers would avoid strikes and disruptions, and both management and labor would share in the successes and failures of the corporation, with top managers taking responsibility when things went wrong. To avoid excessive internal conflict and rivalry, as well as to keep employment costs low, manager compensation and promotion would be largely based on seniority.

Thus, the Japan, Inc. system of strongly rooted managerial autonomy and cooperative labor under strong government guidance was established. In this framework, Japanese management had two fundamental goals: to maintain management autonomy and to maintain the company as an independent and eternally living body. Profit maximization was never a primary objective, and for many was not even an accepted value. The measures of success were company size and relative ranking, revenue growth, market share, reputation, and ability to fund investment either from internal cash flow or from bank lending.

With this structure and method of operation, the companies focused on achieving high quality, ensuring continuous improvement, reducing costs and raising productivity through just-in-time delivery, boosting exports to achieve world-class economies of scale, and increasing investment to maintain growth and increased market share. These characteristics became the hallmarks of the Japanese management system.

This all fit perfectly with the Japanese business environment at the time and also helped to shape it. From the 1950s to the 1970s, Japan had a baby boom that poured young people into the job market. It was efficient for companies to hire them as they left school and to train them over time in the corporate philosophy and discipline. At the time, as there were few seniors in the companies, the seniority system of compensation kept personnel costs low. Because all members of a class moved up together, the system also diminished internal conflicts and rivalries. The government's financial and industrial policies assured funding and reduced risk for companies in favored industries. The quasi-resurrection of the old *zaibatsu* in the form of the new *keiretsu* meant that a number of companies would have cross-holdings in each other, and a main bank, which held shares in each of them, would be their primary lender. There was usually a related insurance company that was a substantial shareholder as well. The bank and the

insurance company, along with the cross-shareholders, were considered stable shareholders who would not sell their holdings and who could be counted on in difficult times to lend to and help restructure the companies in the group. This all reduced investment risk and assured stability and safety in the sense that there were no hostile corporate takeovers, mergers, or acquisitions; no activist shareholders; no legal action by disgruntled shareholders; and that share price movements were relatively modest, because most of the shares were never sold. The *keiretsu* structure also reduced domestic competition: entry by newcomer companies was extremely difficult and distribution *keiretsu* operated to diminish retail price competition. Furthermore, the government's anti-monopoly office was given a minimal staff and budget and was strongly opposed by the other powerful ministries like MITI. As a result, a significant portion of Japanese industry consisted of cartels.

Several other factors were integral to this Japanese management system and to the broader national economic strategy. The government minimized foreign investment in Japan, and—initially, at least—the domestic market was protected from imports by high tariffs and a variety of non-tariff barriers. Thus, there was no competitive threat from outside, and as a result of the domestic cartels, prices for consumers were kept high, thereby underpinning the financial health of the producers. At the same time, the yen was kept undervalued, at first by capital controls and then by government intervention in the currency markets. The government also strongly supported exports with a variety of subsidies and tax deductions.

A final important point about this system is that at the time it was put into place, Japanese companies were largely shooting at known targets. Textiles, steel, autos, television sets, and even semiconductors were existing products and industries for which the technology was widely known and available. Japanese companies didn't have to invent dramatically new products or industries; rather, their main task, and that of their workers, was to make existing products better and more cheaply than their foreign competitors did.

In the heyday of the Japanese company and Japanese management techniques, they accomplished this goal with breathtaking speed and efficiency. First in textiles, then in steel, consumer electronics, autos, machine tools, semiconductors, and many other industries, Japanese companies like Toray, Nippon Steel, Sony, Hitachi, Matsushita, Toshiba, Toyota, Nissan, Fujitsu, and NEC used their own skills and management techniques in the context of the

structure of their economy and their government's policies to outstrip US and European competitors such as General Motors, Motorola, Philips, British Motors, Milliken & Company, Cincinnati Milacron, and many others. The great Japanese corporations seemed invincible, and books about them filled library shelves as executives all over the world attended seminars to learn the secrets of Japanese-style management and the magic of the Japanese corporation.

BIG CHANGE

The great Japanese asset bubble burst in 1992, and it suddenly seemed that Japanese management could do nothing right. Not only did the Japanese economy slide into two decades of stagnation and deflation, but, as noted earlier, many of the biggest and most important corporations suffered dramatic reversals and sustained poor performance. Had all the hype about Japanese management been merely propaganda? Had the success of Japanese companies been mainly due to an undervalued yen, protected domestic markets, and direct and indirect government subsidies? What had happened to make the world-champion managers suddenly look like clowns?

The Japanese economic system had become characterized by networks of strong relationships among suppliers and manufacturers, sellers and buyers, banks and borrowers, executives and enterprise union leaders, bureaucrats and business executives, and schoolmates and classmates. In a fast-growing economy, such relationships reduce transaction costs by establishing trust, thereby facilitating speedy decisions and conflict resolution. Over time, these relationships displace the legal system (which is used mainly by outsiders whose lack of close personal ties inhibits their ability to enter the markets). Despite their advantages, such relationships also lock participants into what effectively are moral commitments. It becomes very difficult to break relationships without serious loss of reputation. For Japanese companies at this time, terminating supplier relationships and laying off workers was virtually impossible. In a rapidly growing, highly regulated, and easily predictable economic environment, the system worked like magic: all the participants in the system were getting what they wanted, mistakes were easily obscured and forgotten, and the relatively few serious problems were swiftly handled by the main banks and the government. Although not at all transparent, the system worked and was widely trusted and accepted.

It must be remembered, however, that the system had been built in order to "catch up" economically to the United States and Europe. By the late 1970s, and certainly by the end of the 1980s, Japan had caught up. Moreover, it had caught up at a moment of rapid globalization and of increasing economic integration, complexity, and sophistication in world business, which brought with it a number of fundamental changes. The 1985 Plaza Accord, a global currency agreement between Japan, the United States, the United Kingdom, France, and West Germany, resulted in a substantial revaluation of the yen. Global markets became more competitive with the rise of South Korea, Taiwan, Singapore, China, and others. To offset the impact of the newly strong yen, the government dramatically increased the money supply, which made credit easier, but also fed an immense asset bubble.

Although the profits of many Japanese companies had been falling in the 1980s, these declines had been more than offset by the capital gains created by the bubble. Thus, the bursting of the bubble in 1992 left in its wake enormous debt problems that put excruciating financial pressure on corporations and banks throughout the economy. Investment and growth came almost to a halt. For too long, both business and government did little, hoping that a rebound of growth would come along to fix all the problems. But it didn't, and in this new environment characterized by low growth and more global competition, many of the perceived advantages of the Japanese management system increasingly began to look like disadvantages.

Of course, many actual management practices such as *kaizen* continuous improvement, *kanban* just-in-time delivery, six-sigma quality, and emphasis on customer satisfaction remained valid and powerful. But these practices could be —and were—copied by global competitors, and there was an erosion of this Japanese advantage. At the same time, the cozy personal and corporate relationships, opaque reports and procedures, and seniority-based promotion and reward practices that had been seen as accelerators and facilitators of fast growth were now understood to be selfish vested interests that were choking Japan's recovery. Last but not least, the lifetime employment and seniority reward systems increasingly looked like millstones around the necks of the companies. It had become clear that companies had to make at least some reasonable profit; lifetime employment for too many workers could mean no profits and thus no employment for any workers. Decisions by old-line companies like Hitachi to begin laying off thousands of workers signaled that the

system of lifetime employment was coming to an end—or at least to a major reform.

But it wasn't just lifetime employment that was at stake. The appointment in 2001 of French-Lebanese-Brazilian Carlos Ghosn as the CEO of number two Japanese automaker Nissan demonstrated dramatically that the whole much-praised Japanese system of corporate governance and management was on the line. Here was a foreigner being parachuted in by the traditional board of one of Japan's most important and most favored companies not only to take over its leadership, but to carry out a management revolution by doing what a top Japanese manager could never do—changing not just the company's structure and practices, but also its culture. Ghosn laid off 21,000 workers, closed five domestic plants, auctioned off prized assets such as the company's aerospace unit, and, most important of all, ended Nissan's reliance on its *keiretsu* network of suppliers with cross-shareholdings in Nissan. For this he became known as the "*keiretsu* killer." He also became known for changing the company language from Japanese to English and for including key executives from North America and Europe in the company's major global strategy sessions. Within a year, Ghosn had Nissan in the black; within three years it was one of the global industry's most profitable companies.

It gradually became clear that the situation had changed, and that the old management doctrines and practices weren't going to be very effective in the future. By 2003, it had become fairly widely accepted that good management and performance ultimately had to be founded on open disclosure and competitive markets, and that the cozy relationships of the past weren't going to continue. Rising global competition, the distress of the banks in the wake of the bursting of the bubble, the need for dramatic debt reduction, and erosion of the stable shareholding system all led to deregulation, de-cartelization, and a shift of power from management to shareholders, who were becoming increasingly distressed that the companies, having paid down their debt, were now sitting on big piles of cash with which they were doing nothing.

Three other phenomena indicated significant changes afoot in the Japanese business world. The first was the increasing pressure on Japanese companies to maintain high earnings in order to achieve the high share prices necessary to obtain financing in global markets and to engage in merger and acquisition activity abroad. Firms like Komatsu, Tokyo Electron, Nidec, and others, finding themselves in competition with the likes of Caterpillar and Applied Materials,

needed to be able to make acquisitions in the US and other foreign markets. These kinds of globally enmeshed firms also needed sources of financing other than the Japanese banks that had been badly wounded in the aftermath of the bubble.

The second phenomenon was the rise of some truly Silicon Valley–like start-up enterprises in Japan. For example, Softbank, which was founded as a kind of software bank in 1981 by Masayoshi Son, had evolved into a huge global telecommunications, Internet, gaming, and publishing company with large ownership shares in Yahoo, E-Trade, and other high-tech services corporations. By April of 2013, it had a market capitalization of US$53 billion, greater than that of the venerable NTT telecommunications firm. Similarly, Rakuten, the online retailing and e-commerce company founded in 1997 by Hiroshi Mikitani, quickly became the largest e-commerce site in Japan, with a market capitalization over US$13 billion and about 10,000 employees worldwide. As with Softbank, market capitalization and profits were extremely important to Rakuten, because it could not rely on some *keiretsu* main bank, and its global strategy drove it to make acquisitions in the United States, France, Germany, Spain, the UK, and Brazil. Also important to both companies was the use of English as the lingua franca. Rakuten made English its official company language for internal as well as external communication in 2012. Meanwhile, Softbank, aiming to improve the English ability of its staff, offered its employees a million-yen (roughly US$8 thousand) bonus for scoring over 900 on the TOEIC (Test of English for International Communication).

The third important indicator of change was employment practices. Instead of taking on "regular" employees who, once hired, could never be fired, Japanese companies increasingly hired temporary or "irregular" workers who could be dismissed once the task for which they were hired had been completed. In 1984 about 15 percent of the workforce consisted of irregular workers; this number had climbed to 25 percent by 1999 and to 34 percent by 2013. This widespread use of contract workers was a strong indication of the possible end of the lifetime employment policy of the Japan, Inc. system—but it was dying hard. Companies like Canon, Toyota, Mitsubishi, and others clung persistently to the old ways.

The merger of Sony with Samsung in 2016 finally triggered the strong move to complete the reform and restructuring of Japanese business. The demise of an independent Sony had particular significance, because it had once been seen as an outsider and maverick company in the Japanese system. Moreover, it had

made many of the changes that reformers were always calling for, such as putting company outsiders, foreigners, and women on its board of directors. Like Nissan, it had brought in a foreigner as chairman and CEO. Yet so ingrained were the dysfunctional habits of Japanese corporations that none of those measures had been enough to save the company.

There were many reasons for this. Sony had thrived in an era of standalone electronics, and was late in adjusting to the Internet. Born as an entrepreneurial start-up company, it had become an enormous bureaucracy. Unlike Nissan and Rakuten, it did not adopt English as the company language, and, as noted earlier, its various divisions failed to speak to each other even in Japanese. Its habit of Japanese consensus building was too slow in the face of the rapid, aggressive style of decision making utilized by the South Koreans. When it tried to reduce staff it ran into Japanese employment laws that restricted employee layoffs; this was compounded by its own lingering culture of lifetime employment. As Howard Stringer, Sony CEO from 2005–2012, said, "If we were actually able to take advantage of the combination of our assets we would be a very powerful company." But why, exactly, couldn't Sony get its act together? In an interview, Stringer explained: "I didn't know I wasn't in control. It was a natural part of Japanese companies to be consensus driven, and I had to spend a lot of time trying to achieve consensus." Sony and the Japanese management system had just run out of time.

A NEW JAPANESE MANAGEMENT MODEL

To the Extraordinary National Revitalization Commission, the Japanese business community seemed like a frog that had been sitting in warm water when the heat was turned up. In such a situation, frogs do not jump out of the pot. Rather, they stay in and gradually boil to death. Now the pot was boiling, and the Commission decided it was imperative to throw the frogs out. Japan faced an existential need for greatly improved productivity. In light of the inevitable short-term decline of the population, it was clear that meeting the costs of the national debt, health care, and pensions, along with rising national security spending, would require at least a doubling and perhaps a tripling of productivity growth rates. For example, Morgan Stanley had charted the combinations of labor-force participation and productivity growth rates that would achieve the cabinet's targeted real GDP for 2020 while allowing pension funds and health-

care systems to meet all their obligations. At the 2014 labor-force participation rate of 82 percent, the productivity growth rate would have to rise from its current 1 percent to 2.8 percent. Or, if productivity growth remained the same, labor-force participation would have to rise to 95 percent in order to meet the target. Clearly, a rise in productivity was imperative. To achieve it, the Commission focused on five key elements: innovation; economic structure; corporate governance; taxes and finance; and labor relations and workforce training.

INNOVATION

Everyone on the Commission agreed that Japan had to find a way to unleash the inherent inventiveness and creativity of the Japanese people. One member noted that even as thousands of good ideas were bottled up in corporations like Sony, the number of new start-up companies in Japan was declining. While there were many specific reasons for this, the major problem seemed to be fear of failure. In countries like the United States, which had many start-ups and a very active new venture sector, there was much talk of risk taking. But actually, the risk was quite low in America, where an enterprising person could leave a present job to establish a start-up, and return to the old job or find a new one if it failed. Employers would actually view the entrepreneur in a positive light for having tried something. Indeed, it sometimes happened that the former employer would invest in the start-up and even lend it resources.

In Japan, this was all much more difficult. If someone left a company to establish a start-up, not only would he not be able to return to that company, but he probably would have trouble getting hired at any other company. Moreover, there were no bank lenders, venture capital investors, or angel financiers for those looking to establish start-ups. Nor was there an infrastructure with lawyers, accountants, marketing consultants, public relations consultants, and others willing to take part-time assignments or partial compensation in the form of equity options, as there was in the United States. In short, the mindset and practices inherent in the prevailing Japanese system were hostile to the innovation Japan so desperately needed.

To remedy this, the Commission proposed several measures. One, a kind of venture failure insurance scheme, would make payouts to founders and employees of failed new ventures to help pay their expenses while they searched

for new employment or new venture funding. Initially, the fund would be financed with donations from the government and from interested private sources. But its continuous funding would come from payments by successful ventures that had registered for the insurance support during their start-up period. The fund would also receive a certain portion of shares in any new venture it insured, and the eventual sale of these shares would also finance the long-term operations of the fund. Finally, the fund would undertake to establish the infrastructure of lawyers, accountants, and consultants necessary to get new ventures off the ground.

In this context, the Commission also noted that Japan had quite a strong and often neglected entrepreneurial capacity among its specialized medium-sized and small enterprises. Somewhat like what the Germans called their "Mittelstand," these companies, which included Anritsu, Nidec, Omron, Fanuc, and many others, were offering highly advanced products and technologies, and held strong global positions in their market segments. In the first fifteen years of the twenty-first century, however, these companies were facing several problems. In the semiconductor industry, for example, Japan's materials, chemical, and equipment companies were all very strong, but the Japanese semiconductor device makers were losing market share and leaving the business. The supplier companies were becoming stranded, meaning that their domestic market was shrinking and their major customers were increasingly in other countries—many of which, such as South Korea and Taiwan, had supply industries of their own that they were trying to promote. With the decline in the number of engineers and scientists graduating from Japanese universities, Japanese suppliers were also finding it more and more difficult to recruit the talent they needed. Moreover, as technology development became ever more costly, the ability of the small and medium-sized companies to continue spending on research and development was increasingly strained. Furthermore, in many of these companies, the owner-operator was aging, and lacked a suitable family member or senior executive to take over.

The Commission responded to these problems by proposing that Japan's Shoko Chukin Bank, a specialist in dealing with small and medium-sized businesses, extend long-term, low-interest credit to support the global marketing efforts of these "Mittelstand" companies. It also suggested that overseas talent recruiting efforts by the Japanese government be particularly focused on recruiting engineers and scientists for these companies. The Commission called for the establishment of a German-style apprenticeship program under which

high-school graduates could be trained in technical skills that did not require a full engineering or science degree. This program would be completed in classrooms and on the job in the companies, and would be jointly funded by the government and the companies. Another idea from Germany was that of the Fraunhofer Society, which carried out cooperative technology development with small to medium-sized companies. For example, the Fraunhofer Society had developed the key algorithms for MP3 coding and essential components for solar energy systems. A similar organization would be established in Japan, with national and local governments providing 30 percent of the funding; the other 70 percent would be earned by the institute's work on engineering and R&D projects for private companies. In this way, small and medium-sized companies could continue to stay at the frontier of technology. Yet another idea taken from Germany was that the government would pay 20 to 30 percent of a company's wages during an economic recession. This "Short-Time Work Assistance," as it was called in Germany, would be temporary, lasting only until the recession was over. By keeping workers on the job who otherwise might have to be laid off, valuable teams and skills would be conserved. The Commission saw this as a measure that fit very well with traditional Japanese concepts.

ECONOMIC STRUCTURE

In the wake of World War II, the Japanese economic system had been structured to deter foreign investment. As a result, even in the first decade of the twenty-first century, Japan had one of the lowest rates of foreign direct investment, and also had less price competition than other developed economies. To stimulate more dynamism through competition, the Commission proposed two measures: greater foreign direct investment and stronger anti-monopoly regulation.

For the first measure, the Commission proposed that Japan adopt the Singapore system of identifying and attracting desirable foreign investment. Indeed, after initial inquiries, the Economic Development Board of Singapore actually worked with METI, the Ministry of Finance, and other Japanese agencies to establish a sophisticated system of attracting investment to Japan. This led to the incorporation of the Japan Investment Attraction Agency (JIAA), which has staff members both in Japan and in most of Japan's overseas embassies, as well as in the venture-failure insurance fund's administrative arm, local governments, and private entities. These representatives, some of whom have been

independently dispatched from the private sector, identify industries, companies, and capabilities that Japan would like to have in its economy.

Having identified candidates for transplantation to Japan, JIAA contacts and woos them with a variety of incentives such as tax abatement, favorable financing, assistance with the recruiting and training of workers and executives, and assistance obtaining necessary infrastructure. JIAA, in partnership with regional and local authorities, has also established several technology industrial parks similar to those in Singapore and Taiwan. In addition to providing facilities for foreign investors, these industrial parks also act as incubators for new Japanese ventures.

Japan had long functioned with a lack of full competition, supported by collusive activity in a number of industries. Agriculture was perhaps the best example. Here a vast network of arrangements and special deals governed an industry into which full competition never intruded. The medical field was another in which allocation of resources was left mostly up to doctors and bureaucracies rather than to market forces. For example, inexpensive generic drugs were as not widely available in Japan as they were in other major economies. A further example was the bid-rigging clubs known as *dango* in the construction industry, where collusion and price-fixing were notorious. To stimulate competition, the Commission proposed doubling the staff and budget of the anti-monopoly office, which now in 2050 aggressively undertakes much more active investigations of anti-competitive relationships to ensure that buyers are getting fair prices.

CORPORATE GOVERNANCE

In considering the slow decision making of major Japanese companies, the Commission concluded that the major problem was the inability of mostly insider boards to resolve the differences between their own cliques, or even to compel the cliques to communicate with one another. As solutions, it proposed two alternatives; corporations would have to choose one or the other. The first was to alter the composition of the board so that instead of consisting entirely or mostly of insiders, it would have a majority of outsiders, of whom at least two would be non-Japanese. The second alternative was to adopt the German-style two-board system. Under this arrangement, the management board, consisting of all the key company executives, would be in charge of continuing operations.

Over this board, however, would be a supervisory board consisting entirely of outsiders except for the chief executive of the company, who would serve on both boards. This supervisory board would be responsible for choosing and evaluating the top company executives and for making decisions regarding long-term strategy and government and community relations. It would also be mandatory that at least two members of this board be non-Japanese, and that the board members be from a variety of backgrounds, such as science, community leadership, and so forth.

Whereas in many countries shareholders are very powerful and can force changes on management, in Japan the opposite was the case. In fact, the Japanese company had been less a company than a management protection society. To overcome this imbalance among the company's stakeholders, the Commission proposed the creation of a Shareholder Ombudsman Agency. This would be an independent agency with the power to impose fines, challenge administrative rulings, and halt bankruptcy, merger, and acquisition activity on behalf of shareholder interests. It would continually monitor corporate activity and would also respond to anonymous complaints by shareholders and issue warnings or fine corporations where appropriate.

TAXES AND FINANCE

When the Revitalization Commission was created, Japan's fiscal, investment, and monetary situation was dire. The ship of Abenomics had been sinking and was taking the yen, government bonds, investment, and national consumption down with it. With the "third arrow" of structural reform producing little increase in investment, employment, or GDP growth, the Bank of Japan's aggressive quantitative easing policies had been fueling a rapid rise in inflation. While the inflation had helped reduce the burden of the national debt, it also had begun to raise interest rates to prohibitive levels, soaking up government revenue and inhibiting any new investment. To alleviate this situation, the Commission called for an emergency levy on the cash balances of all corporations with more than US$1 billion in sales revenue, which would be used for purposes of paying down the national debt to manageable levels. In return, the corporations were granted equity stakes in national assets such as bridges, roads, and national parks, and were to be paid an annual return of at least 5 percent on the amount of the national levy, beginning after five years. Of course, the state also had the

alternative of returning the cash to the corporations with interest paid out of the intended national budget surpluses.

By thus stabilizing the government's finances as well as the yen, the Commission's recommendations, in conjunction with the other fundamental structural reforms already in place, created an extremely attractive environment for new investment by both Japanese and global investors. To make the environment even more inviting, the Commission had added tax reforms that cut the country's corporate marginal income tax rate to 15 percent (similar to Singapore and Ireland), reduced the consumption tax to 6 percent, and introduced a steeply graduated personal income tax that levied low taxes on the poor and middle classes but that dramatically closed loopholes for privately held companies and imposed marginal rates of 75 percent or more on high personal incomes. High rates had also been imposed on some kinds of capital gains (those arising from generally rising real-estate prices, for example), but not on gains achieved as a matter of true innovation and productivity.

LABOR RELATIONS AND WORKFORCE TRAINING

The Commission concluded that, while the lifetime employment system may have been an asset during Japan's high growth period, it had now become more of a burden than a benefit.

Under the conditions created by a shrinking, aging population, the problem was how to achieve maximum labor efficiency. The danger of unemployment or of corporations not properly caring for their employees was quite small. On the other hand, the risk of workers being stuck in one place and not being used in way that would benefit the whole economy was quite large. Consequently, the Commission proposed abolishing the artificial separation between regular (permanent) and irregular (temporary) employees. Salaries, wages, promotions, and other forms of compensation would no longer be based on seniority or regular and irregular status. Positions would have clear job descriptions spelling out required skills, knowledge, experience, duties, goals, and expectations. Hiring would be done on the basis of these requirements, and not, for example, on the basis of having attended a particular university. Employees would receive formal job-performance evaluations based on how well they had fulfilled the requirements of the job description. Annual promotions would not be guaranteed, but would be based on the work the employee had actually done at

the company, and not on special relationships or seniority. Good performers would receive large bonus payments and poor performers would receive small ones—or none. Particularly for young technology personnel, this would open opportunities while also benefiting the companies. Even though research has shown that people tend to have their best and most creative ideas around the age of twenty-seven, the seniority and lifetime employment system of Japan was smothering these people and their brilliant ideas. Other forms of discrimination would also be abolished, such as job postings specifying age and gender, and job application procedures that required a photograph of the applicant and information about his or her family situation. No more, said the Commission.

Finally, compensation for part-time work would be proportional to pay for full-time work. There would be no more lump-sum retirement payouts—they would instead be incorporated into the normal retirement and pension system. Companies would make contributions to the national health and pension systems, but an employee's health and pension benefits would not be dependent on employment by a particular company. Rather, these benefits would be portable, meaning that the employee would have the right to them even if they moved to another company.

A major issue concerned the possible layoff of employees. Of course, this discussion mainly pertained to so-called regular (permanent) employees. Although widely perceived as applying to all Japanese workers, in fact, lifetime employment, or "regular" status had never applied to the large number of Japanese workers who were employees of small and medium-sized companies, or to those who worked part time. The term "layoffs" inevitably brought to mind an image of raw American-style capitalism from which the Japanese recoiled. However, under the law prevailing in the first two decades of this century, a Japanese company had to demonstrate that it was in immediate danger of bankruptcy before it could lay off any regular employees. It further had to demonstrate that it had taken all possible alternative steps, such as cutting executive salaries, offering early retirement, reallocating workers, and so forth, before resorting to layoffs. Finally, it had to demonstrate that it had a rational basis for choosing those who would lose their jobs. This kept layoffs to a minimum, but ironically, being forced to keep excess employees only weakened companies and made them more likely to fail and to lay off everyone in the long run. Moreover, the knowledge that they had little labor flexibility caused companies to avoid hiring if at all possible.

To rectify the situation, the Commission called for new labor laws that would justify workforce reductions for purposes of gaining productivity and profitability whenever a company's performance fell below the industry average.

RENAISSANCE

The combination of all these measures sparked the long and strong business renaissance that Japan is still enjoying today. Almost as soon as the reforms were introduced in 2017–2018, Google, which had previously stayed out of Japan, established one of its computer farms near Kyoto. This decision was also based on the progress Japanese researchers were showing in developing inexpensive and reliable forms of alternative energy. Shortly thereafter, Taiwan Semiconductor Manufacturing Company established a new foundry in Japan, and a steady stream of investments from other non-Japanese companies followed.

One of the most interesting developments was the entry into the Japanese auto market of General Motors and Hyundai. Taking advantage of the new anti-monopoly regulations, they were able to find Toyota, Honda, Nissan, and Mitsubishi dealers who were willing to establish dealerships for Buicks made in China and Hyundais made in South Korea. In other sectors the number of start-up companies exploded: instead of ten or twenty new start-up companies annually, by 2025 there were hundreds of such ventures, and the number continues to grow each year. There have also been many, many spinoffs of divisions of old companies that have been reborn as independent firms.

The takeover of Boeing in 2025 by Mitsubishi Aircraft Corporation was greatly facilitated not only by the failing fortunes of Boeing, but also by the soaring stock price of Mitsubishi Aircraft, which did the deal entirely in exchange for its shares. And by the 2020s the Japanese "Mittelstand" was better known than the German one. Indeed, many people now think Mittelstand is a Japanese word.

Most gratifying has been the performance of Samsung-Sony. The company's headquarters is now in Tokyo; its Walk'n'Talk technology has become ubiquitous, while its God Cloud stores about 75 percent of the world's corporate data. It long ago displaced Apple, Google, Huawei, and Microsoft, and is now by far the world's most valuable corporation.

In short, it has all worked out fine.

CHAPTER 10

Up with the People, Down with the Bureaucrats

You thought Tokyo was impressive, but now, upon arriving in Osaka, you are wondering if instead of coming to a different city, you have come to a different country. The name Singapore keeps recurring in your thoughts. Everything here seems a bit newer, a bit better conceived and executed, and there is a human energy and dynamism that is particularly noticeable. Despite its obvious achievements, Tokyo seemed somewhat freighted with formality and other lingering elements of the bureaucracy and heaviness of the old centralized Japanese government, pervaded at times by the sense of loss that one often feels in the capitals of formerly great empires. Here in Osaka there is none of that. In fact, quite the reverse. Here you sense that bureaucracy and central power have been overturned and local people-power unleashed. This exciting and futuristic city has become a center of excellence in a plethora of fields ranging from medicine to engineering to cuisine, and is looking firmly forward to the future. You inevitably wonder how the old, centralized Japan you knew and loved came to adopt such a dramatically new form of governance.

THE FUKUSHIMA EXAMPLE

Despite its destructiveness, one aspect of the Fukushima catastrophe was very positive. That was the behavior of the Japanese people, especially those who lived in the immediate area of the earthquake, tsunami, and nuclear meltdown. In stark contrast to the looting and rioting that regularly occurred in other countries like the United States and the Philippines under similar circumstances, there had been no such scenes in Japan. Indeed, the world was amazed by the example of patience, good order, brave suffering, and quick organization of relief demonstrated by the ordinary people. This was Japan at its best. Those who knew Japan often remarked that the country's greatest strength was the stoic, long

suffering nature and sound common sense of its citizens. Left to their own resources, they seemed automatically to organize and achieve their objectives in the most efficient, rapid, and equitable manner possible—without a lot of shouting and contention.

But, of course, Japan was also a country with a Confucian ethic that paid great respect to elders, superiors, and officials. Some of these attitudes and thinking were well captured in the old phrase *kanson minpi* ("revere the official —despise the people") that was used by historians and writers in pre–World War II Japan to express the relationship between the governors and the governed in Confucian societies. In this system, which had originated in China and been imported to Japan, a highly educated mandinarate or bureaucracy exercised more or less absolute power in the name of the emperor. Officials were highly honored and rewarded, and families wanted at least one of their sons to become a highly placed official. Of course, one reason why the officials were so powerful was that ordinary people had no rights and could thus be despised by the bureaucracy without fear of retribution.

In the course of its late nineteenth and early twentieth century period of modernization, Japan had adopted a system of governance that concentrated power in the hands of central officials in Tokyo, somewhat similar to the French model in which control was exercised mostly from Paris. Far from loosening this system, the postwar Allied Occupation of Japan had actually tightened it. The American occupiers that took nominal control of the Japanese government in 1945 had, of course, very little knowledge of Japan and how to make it run. They actually administered Japan largely through its existing bureaucracy. With the Japanese military defeated and being disbanded, the prewar *zaibatsu* in the course of being dissolved, and the American overlords knowing nothing about what they were doing, this bureaucracy immensely expanded its power. With strong American backing, the Liberal Democratic Party became the dominant political party, and the elite bureaucracy formed close ties with the party as well as with the big businesses that fell under bureaucratic regulation. These firms typically provided a second career for bureaucrats, who, upon reaching the mandatory retirement age of fifty-five, were granted what was called *amakudari*, a descent from bureaucratic heaven into the less rarefied but more lucrative atmosphere of corporate money-making. Indeed, just establishing the vast network of special counselor and business association positions into which retiring bureaucrats typically descended was a big business by itself. Large parts

of ministries were engaged in planning the parachuting of their members into new positions after retirement. This situation changed a bit in the 1990s in the wake of scandals and with the rise of new political parties. Nevertheless, the structure of governance remained highly centralized, bureaucratic, paternalistic, and stultifying for regional and local governments as well as for ordinary private enterprises.

LOCALIZED REFORM

In response to this oppressive situation, some local leaders launched their own regional reform and restructuring efforts. In chapter 4, there is an outline of the actions of local government in Yokohama with regard to child care. In the early 2000s, the mayor of Tokyo's Suginami Ward, Hiroshi Yamada, went much further with his vision of "Smart Suginami," which aimed to achieve small local government with efficient services using fewer resources. For starters, he privatized a part of the school lunch program. Despite strong opposition from public labor unions and their related political organizations, the move ultimately proved successful, resulting not only in huge savings for the municipality, but in an improved service that even allowed children to pre-order their favorite dishes. In addition Yamada closed some municipal offices, introduced the use of machines to issue resident certificates, and subcontracted various municipal chores to nonprofit organizations. Through these and other measures he was able to reduce the number of the city's employees by more than 600 and to gain savings of ¥25.4 billion (roughly US$200 million). In doing so, he cut the municipal debt nearly in half and more than doubled the municipal savings fund. Yamada also introduced tax deductions for nonprofit organizations that supported child care, elder care, and a variety of other municipal services. In addition, he established a local bus service that provided convenient transportation for Suginami Ward residents while also earning a profit by collecting a small fare. This Suginami example demonstrated that if a leader has a clear vision and is able to communicate well with his people, local reform can be achieved without begging from or praying to the central bureaucracy god.

This trend was reflected elsewhere in the country. At around the same time, the governor of Japan's provincial Tottori Prefecture, Yoshihiro Katayama, was carrying out something of a democratic revolution. He insisted on transparency in every public activity. He made all meetings and official documents open to all

citizens at all times. Indeed, the media and public were encouraged to personally visit the government offices and observe the work whenever they wished. Katayama did away with the traditional, private *nemawashi* (extensive pre-selling) procedure for developing legislation and regulatory rulings and insisted on open debate by all concerned. Thus, working committees that had usually been closed were opened to the public. This meant that working-commitee members could not just sit and say nothing. The traditional Press Club of media representatives was closed down and the issuance of press releases was halted. As Katayama pointed out, since the press was able always to be present when discussions and decisions were taking place, there was no need for press releases or special arrangements for journalists. The prohibition on decision by *nemawashi* led to the cancellation of several public works projects that had been agreed to behind closed doors but that were certain to be money losers and thus a drain on the prefectural budget. As Katayama pointed out, the local assembly was accustomed to automatically passing things that had already been secretly agreed to through *nemawashi*. This kind of deal making inevitably meant that some of the people involved in the decision owed something to others who had also been involved in the decision. This led to corruption. When the actual power of decision making shifted to the speakers on the floor of the assembly, policies and projects were adopted only on the basis of their potential contribution to the public good, he argued.

There were occasions on which Katayama's proposals were rejected by the assembly, something that had never occurred in the case of previous governors. His view was that this was good, because it demonstrated that even a governor could be overruled by the representatives of the people. Too often in the past, he said, the assembly discussion had been simply a Kabuki play. The end of *nemawashi* resulted in more young members of the assembly becoming active in debate and in many new and good suggestions. Similarly, after Katayama's establishment of the rule that there be a mandatory report of any assembly member's intervention with the local government asking for a *kuchikiki* (special consideration), the number of such actions dropped dramatically, as members were forced to consider whether such a request could survive open debate of a bill in the assembly.

Other cities and regions followed this lead toward more local initiative. In the south of Japan, beginning around 2009, Mayor Kenji Kitahashi began promoting Kitakyushu City as an "eco-town" with low carbon emissions, aiming to establish

the city as a hub of Asian eco-collaboration. He and his team also promoted establishment of new connections to Nagoya and other regional cities by local start-up Fuji Dream Airlines. At around the same time, Toyama City's mayor, Mori Masashi, focused on developing his municipality as a "compact city" that could deal well with an aging society. This entailed designing the city so that hospitals, shops, administrative services, and other important centers were easily reached by public transportation. To take advantage of these services, the city also encouraged elders to move into the city center by providing low-cost residential space. Meanwhile, Yuji Kuroiwa, the governor of Kanagawa Prefecture, promoted Kanagawa as a center for "new frontier health care." He even went so far as to sign Memoranda of Understanding with overseas cities and regional governments. The agreement with the state of Massachusetts in the United States is a good example. Signed in May, 2014, it covers shared development of medical devices, life sciences, and health-care industries. Thus Kanagawa and Massachusetts exchange experts and research reports, and each benefits from the advances of the other. The agreement also established a collaboration between Kanagawa Prefecture and the Massachusetts Life Sciences Center and the Massachusetts Clean Energy Initiative.

The most important center of local and regional governmental reform activity was, of course, Osaka, where, beginning in 2011, Mayor Toru Hashimoto set out to achieve much greater regional autonomy and smaller, more efficient government for the whole of Osaka Prefecture, including the city of Osaka itself and the neighboring city of Sakai. Some of his more controversial reforms included privatization of the metropolitan subway, cutting the city's payroll of 38,000 in half, reducing the power of the teachers' union, cutting support for the Osaka Philharmonic Orchestra and artists guilds, and withdrawing long-sacrosanct subsidies to the traditional puppet theater companies. He also provided for free tuition at both public and private high schools, privatized the government audit, and revitalized the Osaka airports. More broadly, he emphasized the necessity of greater regional unification and autonomy. As one official noted, "We used to have to get four or five different permits from Tokyo just to move a stop sign." Or, take the situation of land use. The city of Osaka owned about 26 percent of its own land area, but as one of the city's consultants explained, it was very difficult for the city to use the land in the best way because of regulations and control from Tokyo. In one case, the city of Osaka purchased a museum owned by the central government with the intent of making it into a hospital, but had difficulty in doing so because of objections from MEXT. Nor

could the city do as it wished in terms of infrastructure development because of the way the tax and urban financing system were structured. Only about 33 percent of the taxes sent by Osaka to the national government came back to the region. The rest stayed in Tokyo or were sent in the form of subsidies to support other regions, particularly agricultural ones. This resulted from the fact that there was no system of self-funding for local governments. Indeed, because of the opposition of the central Ministry of Finance, municipalities could not even issue bonds without the permission of the central government. Of course, their taxing power and ability to use taxes and other financial incentives to attract investment, foster innovation, or fund and develop top-notch regional universities and schools was also severely limited. Osaka had been the center of the booming textile industry in the years after World War II, but that business had long ago left Japan for developing countries like China, Vietnam, and Bangladesh. The city and region desperately needed to develop and attract new industry, but, like other regions outside of Tokyo, was hampered in doing so by the oppressive regulation of the central government.

What Osaka really needed, according to several of the Commission members studying the situation, was not deregulation, but complete decentralization. This view was eventually adopted by the full Commission, and Osaka, along with most other Japanese cities and prefectures, was mostly freed from its Tokyo overlords with the exception of matters relating to defense and foreign affairs, which continued to be handled centrally. The result has been that Osaka is now often compared to Singapore as a kind of oasis of excellence where everything is well planned, well operated, and functional. As a result of the privatization of its health-care industry, it is now a global medical center with patients visiting from all over the world to benefit from its advanced treatments and world-class doctors. By reducing corporate taxes from nearly 40 percent to 10 percent for all companies located and operating within its jurisdiction, the city is now experiencing a rush of new investment, production, and innovation from companies that can spend much more on R&D. Osaka students have become well known for their fluency in English. This is the result of the privatization of the municipal elementary and middle schools, which has allowed the replacement of non-English speaking English teachers with professionals who are fluent in the language. In this environment, innovation, new business, and new culture are blossoming and flourishing. Moreover, with Osaka as the guide, decentralization has been spreading all over the country, making Japan once again an example among nations.

FULL DECENTRALIZATION

Having thoroughly reviewed Japan's economic structure and system, carefully studied other economies around the world, considered the positive results of the local reform efforts, and analyzed how revitalization in Japan had occurred in the past, the Commission came to a fundamental conclusion. It was that the problem in Japan was not essentially economic; rather it was political. The most important issue facing the country was governance. When left to govern themselves, the people of Japan did amazing, innovative, productive things. But when highly controlled by a central governing elite, they were unable to operate at their full capacity and to fulfill their great potential. For Japan to realize that potential in the future would require a dramatic change from the prevailing centralized political structure to a decentralized system.

Thus, the Commission's final recommendations in 2016 led to a dramatic restructuring of the map of Japan. In place of the long-existing forty-seven prefectures, there are now fifteen large regional cantons organized similarly to the states of the United States or the Lander of Germany. Like the former prefectures, each canton has a legislature and a governor. But the greatly expanded powers of these bodies make them almost entirely self-governing except for defense, foreign affairs, and central banking. Perhaps most important is the fact that the new cantons are self-financing. They have the power to borrow and issue bonds, but also the possibility of accumulating too much debt and falling into bankruptcy. The central government shares its powers and can only intervene in the cantons under very limited circumstances. Thus, for example, MEXT might develop general guidelines for school curriculums, but it would be up to each new canton to decide its own specific curriculum and to determine which books would be used for instruction. Each new canton decides whether its teachers should have civil service status and can privatize schools and universities, use voucher systems, or keep the schools as government institutions, depending on the wishes of its citizens. The new cantons of course have inherited the bulk of the nation's taxing power including income tax and corporate tax. One result of this has been a dramatic reduction of corporate taxes as the cantons attempt to attract new corporate investment. The old national system for the recruitment of civil servants has been abolished, and each new prefecture has its own civil service exam, and decides itself what the terms of employment of civil servants will be in its region. The new cantons compete with each other on economic policies and processes and have the authority to open and expand free-

trade areas as they see fit. In this way the power of the regions has been dramatically increased and the potential of their citizens unleashed, while the power of the central government and of Tokyo to monopolize talent and crush new ideas and new people has been reduced, although the areas of national security and foreign policy remain the monopoly of the center.

The Commission members debated long and intensely among themselves before adopting the decentralization policies that have led to this dramatic evolution. Those who first proposed doing so had several strong reasons for their view. First, they noted that competition increases innovation, efficiency, and productivity. Centralization and concentration of government, business, or anything else tends to produce uniformity, waste, inefficiency, and stagnation. Combating this tendency in business was the rationale for the existence of the Fair Trade Commission just as it was for the existence of the American antitrust laws and the European Union's Competition Commission. In the same way, and for the same reasons, there needed to be competition in governance. Such competition would increase innovative trials, attract investments and more residents, and raise competitiveness both in the regions and in the nation. It would make Japan wealthier and stronger by fully materializing its potential power and ideas, and would increase the welfare of its citizens while raising the ability of the nation to meet economic and political challenges from abroad such as those then being posed by China.

The proponents further argued that concentration of power and activity in Tokyo was not only a major cause of economic stagnation, but also a national security danger. The United States had several major power centers such as Washington, New York, Chicago, and others. China had Beijing, Shanghai, and Guangzhou. But if Tokyo were to be incapacitated by a nuclear calamity like the meltdown at Fukushima, a major earthquake or typhoon, or a missile attack, the whole country would be put out of action.

A third point was that if Tokyo continued to absorb most of the talent and wealth in the nation, the rest of the country would be left as an aged, indigent ward of the government living a miserable life on subsidies. This led to the final argument in favor of the proposal, which was that change in Japan has always come from outside the center. The modernizing changes of the Meiji period at the end of the nineteenth century came about because of outside pressure from the United States and from Japan's own provinces of Satsuma and Choshu, which were located far from Tokyo and had long managed to maintain a high

degree of independence from the central authorities. Japan's defeat in World War II and the Allied Occupation that followed had again provided outside pressure that opened society to change and structural reform, resulting in the economic miracle of the 1960s. Innovation in Japan had usually been sparked by outsiders, by people not born or educated in Tokyo. Thus, there was much potential dynamism in the regions, and it was a great loss to have this stymied and smothered by central government. Moreover, because of Japan's outstanding communications and transportation infrastructure, there was really no need to have most of the country's talent and virtually all government bureaus and corporate headquarters in Tokyo. Everyone could easily get to Tokyo if that was necessary, but there was no reason to stay there all the time. Thus, the supporters of decentralization concluded that allowing the continued death of the regions would eventually cause the death of Japan.

Those who were initially undecided about decentralization raised several concerns. They feared that this kind of strong regional governance could result in some regions becoming very wealthy while others became more impoverished. The gap between rich and poor could become greater, and they feared this would be dangerous for a country that had long idealized the economic equality of its citizens. Their greatest concern, however, was more a matter of timing and conditions than of principle. They strongly felt the challenge being posed by China and the need for Japan to have a strong economy in order to respond to this challenge. At that moment, the country was still suffering from lagging competitiveness and other economic illnesses. It needed to recover strong economic momentum before making such a fundamental change in the structure of its governance, the undecided ones suggested. Perhaps, they argued, in ten or fifteen years, conditions would be more favorable.

But that was just the problem, the proponents replied. The country was always waiting for better conditions in order to change. But better conditions never seemed to arrive, and, thus, change never occurred. Everything continued as it had always been, getting sometimes better and sometimes worse, but trending always downward. Could the reason that better conditions had not arrived be that no change had occurred? Could the lack of change in governance be the primary reason for the continued absence of better conditions? Yes, the supporters said; it was precisely the lack of change that was the main cause of continued economic weakness. Japan, they argued, had to change its governance in order to become strong and capable of responding to challenges from China or anywhere else.

Eventually, that way of thinking came to be accepted by a large majority of the Commission. Thus, its final and most important recommendation was for the country to proceed with decentralization immediately. As we now know, that recommendation was also adopted by the Diet. The result, of course, was the restructuring of governance and a huge wave of new competition, innovation, and rising productivity that has resulted in the third Japanese economic miracle. By allowing the Japanese people more fully to organize their own work and lives and by not insisting on directing everything from the center, Japan's leaders have achieved far more than they had ever hoped. It turned out that less leadership was actually more.

Thus, it has truly been the Japanese people who have brought about the third reinvention of Japan in the course of the first half of the twenty-first century and who, by 2050, have made Japan number one again in terms of its living standard, quality of life, and peaceful relations with neighbors.

CONCLUSION

Why Japan Matters to America and the World

If, as a non-Japanese reader, you have gotten this far, you may well be silently mouthing the words—*so what*? Yes, you say, this is all very interesting and one can see that Japan is facing some major—even existential—issues and of course one wishes the Japanese well. But really, outside of Japan, aside from sympathizing with the plight of the poor Japanese, why should anyone really care?

Let me count the reasons. For starters, there is the fact that we live in a global economy of which Japan forms the third largest part after the United States and China. Much has been made of the BRIC (Brazil, Russian, India, China) countries, their rapid economic growth, and their contribution to the lifting of hundreds of millions of people out of poverty. But we must not forget that Japan's economy is roughly equivalent to those of Brazil, Russia, and India combined. We must also keep in mind that Japan is an enormous exporter of capital, with more than US$1 trillion of direct investment overseas. This investment directly supports about 4 million workers, and indirectly supports two to three times that many in a variety of countries around the world. In the United States alone, Japanese investment comes to more than US$300 billion and directly supports about 700,000 jobs, each paying around US$78,000 annually, according to a 2011 *Select USA* report on foreign direct investment. Indirectly, this investment supports hundreds of thousands of additional jobs. In addition, Japan is the second largest investor in US Treasury debt, with holdings of US$1.24 trillion, just behind China's US$1.25 trillion. Thus, the erosion of Japan as a gigantic economic power would have immense negative consequences for the global economy and for the United States particularly.

But the numbers don't begin to tell the full story. Consider for a moment what is commonly called the "global supply chain." This refers to the system of global production of things like the Apple iPhone in which various parts of the

product are manufactured in several different countries, delivered to be assembled in another country, and then delivered to be sold in all the countries of the world. Under this system, all the parts must be produced precisely at the right time to be picked up by a logistics company such as FedEx, in order to be delivered at precisely the right time to an assembler halfway across the globe, in order to be assembled at precisely the right time again to be picked up by FedEx and delivered on schedule to your local Apple store. Where did this concept of "just-in-time delivery" originate?—In Japan, of course. Prior to Japan's 1960s economic miracle, manufacturers around the world maintained large lots and warehouses to store materials and components while waiting put them onto the production line. This required extra space to be bought or rented, as well as extra bank financing for the materials sitting around waiting to be used. It was the Japanese who came up with a solution to this problem—perhaps because of their traditionally small living spaces, or perhaps because of some special gene, or perhaps because the Japanese people, more than any other in the world, hate clutter and waste—what they call *muda*. In trying to achieve ever-lower costs, the Japanese manufacturers of the 1950s and 1960s realized that if components could be delivered on a precise schedule by the suppliers there would be no need for the warehouses and holding spaces. Thus was developed the concept of just-in-time delivery, a process that underlies today's global supply chain.

But an even more important concept was essential to the realization of just-in-time delivery. This was high quality and continuous quality improvement, or what the Japanese call *kaizen*. What good was it to deliver a component just in time if the component was faulty? In fact, that was worse than maintaining the warehouses and holding lots. At least if you had the parts in storage, you could readily find a replacement for a faulty part. But without a parts inventory, a faulty part delivered just in time would, in fact, be just in time to shut down your whole production line. So, unless a producer had a strong degree of confidence that a supply of very high quality parts would be available without interruption more or less eternally, there was no sense in producing on a just-in-time basis. But Japanese makers did have this confidence because throughout the country's entire industry the insistence on ever-higher quality and ever-greater perfection was unrelenting. It was from Japan that the emphasis on high quality spread throughout the world. If you appreciate the quality of your Ford or Volkswagen or Hyundai today, you can thank Japan. And the same is true for virtually any other manufactured product you buy or use.

In short, Japan has been the source of some of the most fundamental concepts and processes underpinning the modern world economy. These have been copied by the most advanced countries like the United States and Germany as well as by the Asian Tigers and China's emerging Dragon. The loss to the world of such unique concepts and processes emerging from the soul of Japan would be incalculable.

But now let's look at some things that may be more important than production and supply chains. When my wife and I first lived in Japan in the early 1960s, we encountered raw fish in the form of sushi, a dish virtually unknown outside of Japan and Korea. After all, who would eat something weird like that? But we loved it. Indeed, my wife suggested that upon returning to the United States we should look into opening a sushi restaurant or even a chain of such restaurants. Said I: "No way. Americans will never swap burgers and dogs for something like raw fish. Forget it!"

"Okay, maybe you're right," said my wife. "But I have another idea. You know those rice crackers wrapped in seaweed? I'll bet they'd be a big hit in the US if we exported them from Japan." Again, my reply was negative: "Dream on. You think Americans are going to eat seaweed or some kind of cracker made out of rice? No way. Forget it!"

Of course, I'd be a very rich man if I had only listened to my wife. My only consolation is that there are a lot of other men who could say the same thing. But fortunately, others saw and acted upon the instincts my wife had. Now, it's not at all surprising to find excellent sushi and other Japanese cuisine in Paris, Dallas, Tel Aviv, Beijing, and everywhere else around the globe.

Or consider the concept of *shibusa*—the Japanese ideal of unobtrusive beauty. Beautiful objects in Japan (a tea house, a Zen garden, a ceramic bowl) appear at first to be simple and spare with an economy of form and effort. Yet, upon further observation, they reveal textures or subtle imperfections that create a balance of simplicity and complexity inspiring a sense of timeless quality, tranquility, and endless new discoveries, all of which makes for ever-enhanced value. In the realm of the theatre, Japanese Kabuki and its occasional contrast of the notions of *tatemae* (the formal face of persons or things or situations) and *honne* (the actuality of persons, things, and situations) is perhaps the most perfect articulation of the large and small hypocrisies that people all over the world indulge in for the sake of social harmony.

Or take manners and personal relationships. Japanese are sometimes seen by

outsiders as excessively formal, stylized, and inhibited. On the other hand, the manners of Japan reflect a general sense of deep respect for others. How many times have I purposely left a memento behind in a Japanese hotel room because I didn't want to carry it on the trip home only to have a hotel employee track me down before departure—or even at the airport—to return it to me? And you'll never be kept waiting if you have an appointment with someone in Japan, no matter his or her rank. By the same token, any Japanese person visiting you will be exactly on time. Indeed, they will probably have done a dry run the day before to ensure their punctuality.

Are all these rich Japanese streams of cuisine, art, culture, and manners to be lost to the world as the giant increasingly falters? If so, the we all will be greatly the poorer for it.

Of course, these are the concerns of the long term. More immediately, the world is experiencing a transformation of epic proportions. For most of recorded history until about 1850, China and India were the world's two largest economies, and Asia as a whole had a far bigger economy and was far wealthier than Europe and the Americas combined. By 1950, these two great Asian nations had become mere shadows of their former selves, as Western Europe and then the United States emerged as superpowers dominating the global economy and global politics. We are now experiencing a reversal toward the old norm. It will likely not be a complete reversal, but at market prices, China's economy is already about three-fourths the size of that of the United States (it is actually larger if one uses purchasing power parity measures that are adjusted to take into account the tendency of developing economies to have abnormally low prices for household commodities), and India's is now rising almost as rapidly as China's (more rapidly by some measures). Almost certainly, the world will be turned upside down once more by the year 2050. That is to say that Asia will be back on top—at least in terms of total GDP.

This transformation began in 1992, when the states of the former Soviet Union, India, and China all abandoned communist and socialist economic policies and turned to some form of capitalism. Western observers at the time, such as Francis Fukuyama, hailed this "globalization" as the "end of history" and the beginning of a final liberal and democratic age of humanity. Some American political leaders claimed that globalization was just Americanization by another name. The notion, espoused by such figures as former president Bill Clinton and *New York Times* columnist Tom Friedman that "globalization will make all

countries rich, and, as they become rich they will become democratic, and, being democratic, they will not go to war because we know that democracies don't fight each other" became a frequently repeated mantra. The best and the brightest of America and the West became convinced that the globalization of capitalism would bring democracy and peace to revive the suffering world.

Of course, it hasn't worked out that way. Indeed, the reverse seems increasingly possible. Far from becoming a more politically liberal, free-market state, China appears to be developing a kind of state-guided capitalism under a more authoritarian political direction. The success of this model has great attraction for other countries, especially Russia. Indeed, the state-capitalist concept is being increasingly extended into the open market. Keep in mind that the world's major corporations are global, which means they don't really have a nationality. It is a mistake to think of Apple, for example, as an American company, or to imagine that Shell Oil is either a Dutch or a UK company. They are global companies, with most of their operations outside the country of their incorporation or headquarters. The great irony is that globalization has made them less subject to the power of the liberal free-market democracies and more subject to that of the authoritarian countries pursuing varying degrees of state capitalism. In Washington or Brussels or London, a company like Apple or Google or Mercedes-Benz or Barclays is a major political player. Its CEO can see the president of the United States or the head of the EU with ease. He has legions of lawyers and lobbyists at his beck and call to influence, promote, or stop legislation. He can sue the US government and win in court. He has hundreds of millions of dollars available for political donations.

In Beijing, however, this same CEO is not a player at all. He is a supplicant for permission of one type or another from the Chinese government and its ruling Communist Party. To be sure, the surroundings are plush and tea is politely served. But make no mistake. The CEO is on his knees. He may well be found promoting the Beijing line in Washington.

Japan has been a successful non-Western democracy and thus a powerful model for developing countries in the rest of Asia and around the world. At this time of shifting balances of power, with increasing uncertainty about the extension of the rule of law around the globe, the slow death of Japan would be a terrible blow to the hopes of those who believe in democracy and a rule of law.

Even more importantly, Japan's continued demise would be tremendously destabilizing, especially in the Asia-Pacific region, but also globally. As things

stand while I write in February of 2015, much of Asia is becoming less stable and secure as the result of five key factors. One is the insistence of the United States on continuing to patrol the waters and skies around China as it did during the Cold War, despite the fact that the Cold War is long over, that China poses no threat to the United States, and that America has said it welcomes China as a global partner. Another is the rapid expansion of China's military forces and its sometimes aggressive claims to rights in disputed waters and territories. Yet another destabilizing factor is that World War II is still not really finished. Then there is the erosion of Japan's vitality that we have been discussing. Finally, there is the increasing divergence between the interests of the United States and those of its Asia-Pacific allies.

A complex logic is at work here. Because the Allied Occupation authorities retained the emperor and the vast bulk of Japan's wartime bureaucracy at the end of World War II, and also because of the rapid follow-on of turmoil caused by the communist revolution in China and the outbreak of the Korean War, neither Japan nor the countries it had invaded and occupied ever experienced the kind of postwar catharsis that occurred in Germany and Western Europe. Japan's new no-war constitution served as a kind of surrogate for such a catharsis, but, of course, it was only viable in combination with the US-Japan Security Treaty of 1951, under which the United States took unilateral responsibility for Japan's defense. This was essentially an agreement by Japan to outsource its foreign policy to Washington in return for a guarantee of security and support for what would become the Japanese economic miracle. Indeed, the then Prime Minister Shigeru Yoshida explicitly emphasized that Japan should focus on economic recovery while leaving the rest to the United States for a time. Underlying this arrangement was the implicit assumption that the interests of the United States and Japan would be more or less exactly the same indefinitely.

During the Korean War and most of the Cold War period, this was a pretty good assumption. It began to fray a bit in the 1980s, when Japan's mercantilist economic development and trade policies began to undercut important US industries. But the priority of Washington's Asia-Pacific geopolitical objectives, and the need for forward bases in Japan to fulfill them led the US, while complaining loudly, to maintain a steady course.

Now, however, the end of the Cold War, the rise of China to great power status, the increasing alignment of South Korea with China, the continued bitterness between South Korea and Japan, and the relative decline of American

power have greatly altered not only the economic calculus, but—far more importantly—the geopolitical calculus as well. The interests of the United States and Japan are no longer completely congruent. It is not in America's interest to be drawn into a confrontation that could lead to war with China over who owns what in the East China or South China Seas, or anywhere else for that matter. The continued ambiguity of Japan with regard to many of the incidents of World War II—for example the "comfort women" issue or the Rape of Nanking—makes it increasingly difficult for Washington to rationalize the old security arrangements. All present forces are pushing toward some greater degree of separation between Japan and the United States.

And yet. And yet. It is greatly in the interest of the United States to have a robust, democratic, militarily strong Japan that has made its peace with World War II, that conducts its own peace-oriented foreign policy, and that is willing to contract mutual security arrangements both with some of its key immediate neighbors and with the United States, as well as others such as Australia and India. Such a Japan would greatly lessen the geopolitical burden of the United States while also strengthening democratic forces globally and contributing to worldwide economic growth.

The rest of the world, and especially the United States, has a huge stake in having this kind of a Japan restored.

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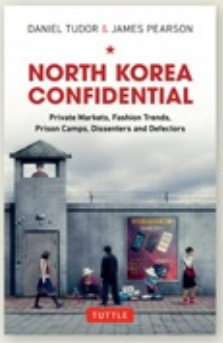
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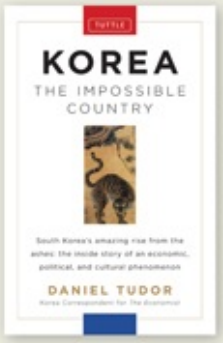
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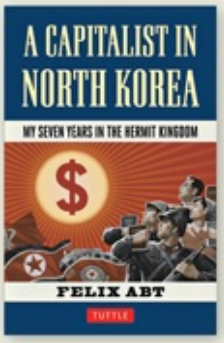

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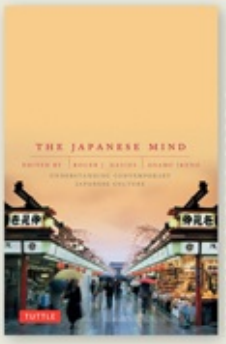

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